

inputting a signal and a transmission schedule associated with said signal, said transmission schedule comprising a code designating said signal and at least one of:

- (1) a time at which to transmit said signal; and
  - (2) a channel on which to transmit said signal;
- transmitting said signal according to said schedule;  
selecting one of said code and an identifier associated with said signal;  
and  
logging said step of transmitting said signal.

3. (Unchanged) A method of processing signals to control a plurality of user stations, each user station having a processor, said method comprising the steps of:

receiving a programming signal which contains mass medium programming and communicating said programming signal to a storage device;  
receiving at least one instruct signal which is effective to instruct a first of said plurality of user stations to transmit said programming signal according to a transmission schedule and one of said first of said plurality of user stations and a second of said plurality of user stations to log a transmission record of said programming signal;

selecting one of the group consisting of:

- (1) a time at which to communicate; and
- (2) a memory location to which to communicate;

communicating a first of said at least one instruct signal one of at said selected time and to said selected memory location; and

storing said programming signal and said first instruct signal at said storage device.

4. (Unchanged) The method of claim 3, further comprising one of the steps of:

embedding said first instruct signal in said programming signal;

embedding a code in said programming signal that enables a processor to control a presentation of said mass medium programming contained in said programming signal in accordance with said first instruct signal;

communicating a program unit identification code to said storage device and storing said program unit identification code at a storage location associated with said programming signal;

communicating to and storing at said storage device some information to evidence one of an availability, use, and usage of one of said programming signal and said mass medium programming contained in said programming signal at a user station;

communicating to and storing at said storage device a second instruct signal which is effective at a user station to generate some output to be associated with one of said programming signal and said mass medium programming contained in said programming signal;

communicating to and storing at said storage device a second instruct signal which is effective to generate some output to be associated with one of a product, service, and an information presentation;

communicating to and storing at said storage device a second instruct signal which is effective to display one of a combined and a sequential presentation of a mass medium program and a user specific datum;

communicating to and storing at said storage device a second instruct signal which is effective to process a user reaction to said mass medium programming contained in said programming signal;

communicating to and storing at said storage device a second instruct signal which is effective to one of communicate to a remote station a query in respect of information to be associated with said programming signal, and to enable display of said mass medium programming contained in said programming signal;

communicating to and storing at said storage device a second instruct signal which is effective to control a user station to receive information to supplement one of said programming signal and said mass medium programming contained in said programming signal;

communicating to and storing at said storage device a second instruct signal which is effective to process a digital television signal which is separately defined from analog television; and

communicating to and storing at said storage device one of a code and a datum to serve as a basis for one of enabling an output device to display at least a portion of said mass medium programming contained in said programming signal, and for enabling a processor to process executable code.

5. (Unchanged) The method of claim 3, wherein said selected memory location is within said programming signal at said storage device, said method further comprising the step of storing some information at said storage device that evidences at least one of:

- (1) a title of a television program;
- (2) a proper use of programming;

- (3) a transmission station;
- (4) a receiver station;
- (5) a network;
- (6) a broadcast station;
- (7) a channel on a cable system;
- (8) a time of transmission;
- (9) a identification of an instruct signal;
- (10) a source or supplier of data;
- (11) a distributor or an advertisement; and
- (12) an indication of copyright.

6. (Unchanged) The method of claim 3, said method further comprising the steps of:

selecting one from the group consisting of:

- (1) a datum that identifies a unit of computer software in said programming signal;
- (2) a datum that specifies some of a way to instruct receiver equipment what specific programming to one of:
  - select to one of play and record other than that immediately at hand;
  - load on one of player and recorder equipment;
  - instruct when and how to one of play and record other than immediately;
  - instruct how to modify said specific programming;
  - instruct one of what equipment, channel and channels to transmit said specific programming on;
  - instruct when to transmit said specific programming; and

instruct how and where to one of file, refile and dispose of said specific programming;

- (3) a datum that designates an addressed apparatus;
  - (4) a datum that specifies one of where, when, and how to locate a signal;
  - (5) a datum that informs a processor of a fashion for identifying and processing a signal;
  - (6) a datum that is part of a decryption code;
  - (7) a comparison datum that designates a communication schedule;
- and
- embedding said selected one in said programming signal.

7. (Unchanged) The method of claim 3, wherein said storage device comprises a file storage medium and said programming signal and said first instruct signal are stored in a file on said file storage medium, said method further comprising the steps of:

selecting a second instruct signal, said second instruct signal being one from the group consisting of:

- (1) a switch control signal;
- (2) a timing control signal;
- (3) a locating control signal;
- (4) an instruct-to-contact signal that designates a remote receiver station;
- (5) an instruct-to-transfer signal that designates a unit of broadcast or cablecast programming;

- (6) an instruct-to-delay signal that designates a unit of broadcast or cablecast programming;
- (7) an instruct-to-decrypt or instruct-to-interrupt signal that designates a unit of programming and a way to decrypt or interrupt;
- (8) an instruct-to-enable or instruct-to-disable signal that designates an apparatus;
- (9) an instruct-to-record signal that designates a broadcast or cablecast program;
- (10) an instruction signal that controls a multimedia presentation;
- (11) an instruction signal that governs a broadcast or cablecast receiver station environment;
- (12) an instruct-to-power-on signal that designates a receiver;
- (13) an instruct-to-tune signal that designates a receiver or a frequency;
- (14) an instruct-to-coordinate signal that designates two apparatus;
- (15) an instruct-to-compare signal that designates a news transmission or a computer input;
- (16) an identifier signal that causes a computer to instruct a plurality of tuners each to tune to a broadcast or cablecast transmission;
- (17) an instruct-to-coordinate signal that designates two units of multimedia information and one of: (1) an output time and (2) an output place;
- (18) an instruct-to-generate signal that designates an output datum;
- (19) an instruct-to-transmit signal that designates a computer output;
- (20) an instruct-to-overlay signal that designates a video image;
- (21) an instruct-that-if signal that designates a function to perform if a predetermined condition exists;

(22) an instruct-to-enable-and-deliver signal that designates information that supplements a video image;

(23) an instruct-to-transmit signal that designates a computer peripheral storage device;

(24) a code signal that designates a datum to remove or embed; and

(25) a signal addressed to a receiver station apparatus; and

storing said selected second instruct signal in said file on said file storage medium.

8. (Unchanged) A method of generating and encoding signals to control a plurality of user stations comprising the steps of:

receiving and storing a program that contains video information;

receiving an instruction, said instruction having an effect at said plurality of user stations to transmit said program according to a transmission schedule and to log a transmission record of said program;

encoding said instruction, said step of encoding translating said instruction to a control signal, said control signal for directing a processor at a user station to perform said effect indicated by said instruction with said program, said control signal interacting with predetermined user data, said predetermined user data being potentially different at each of said plurality of user stations; and

storing said directing and interacting control signal from said step of encoding.

9. (Unchanged) The method of claim 8, wherein supplemental program material is stored at the location of said processor and said control

signal from said step of encoding directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further comprising one step of the group consisting of:

storing supplemental program material in conjunction with said program and said control signal; and

storing a second control signal in conjunction with said program and said control signal from said step of encoding, said second control signal having effect at a user station to one of query a remote station and receive supplemental program material in one of a broadcast and a cablecast transmission.

10. (Unchanged) The method of claim 8, wherein said control signal from said step of encoding directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further one step of the group consisting of:

transmitting a combined video signal from said program and said video overlay generated by said processor over a broadcast or cablecast network to a plurality of receiver stations; and

transmitting a combined video signal from said program and said video overlay generated by said processor to a co-located video display.

11. (Unchanged) The method of claim 8, further comprising the steps of:

receiving a second instruction, said second instruction being one of the group consisting of:

(1) an instruction which is effective at a user station to generate some output to be associated with said program;



- (2) an instruction which is effective at a user station to generate some output to be associated with a product, service, or information presentation;
- (3) an instruction which is effective at a user station to display one of a combined and a sequential presentation of a mass medium program and a user specific datum;
- (4) an instruction which is effective at a user station to process a user reaction to said program;
- (5) an instruction which is effective at a user station to communicate to a remote station a query in respect of information to one of be associated with said program and to enable display of said program;
- (6) an instruction which is effective at a user station to control a user station to receive information to supplement said program;
- (7) an instruction which is effective at a user station to process a digital television signal which is separately defined from analog television; and
- (8) an instruction which is effective at a user station to serve as a basis for enabling an output device to one of display at least some of said program and for enabling a processor to process some executable code.

encoding said second instruction, said second step of encoding translating said second instruction to a second control signal, said second control signal for directing said ancillary processor to perform said specified second effect indicated by said second instruction with said program; and

storing said second control signal from said second step of encoding in conjunction with said program.

12. (Unchanged) The method of claim 8, further having one the group consisting of:

embedding said control signal in the non-visible portion of a television signal;

embedding a code in said program that enables one of a computer and a controller to control a presentation of said program in accordance with said control signal;

communicating a program unit identification code and storing said program unit identification code at a storage location associated with said program; and

communicating to and storing at a storage location associated with said program some information to evidence one of an availability, use, and a usage of said program at a user station.

13. (Unchanged) A method of communicating data and update material to a network of a plurality of data receiver stations each of which includes one of a broadcast and a cablecast data receiver, a data storage device, a control signal detector, a computer capable of processing said data, with each of said plurality of data receiver stations adapted to detect and respond to at least one instruct signal and to store at least one datum of said data for subsequent processing, wherein a first of said plurality of data receiver stations further includes an intermediate transmitter, said method comprising the steps of:

receiving said data and delivering said data to at least one origination transmitter;

receiving said at least one instruct signal wherein said at least one instruct signal is effective in said network to cause said first of said plurality of receiver stations to identify said data and transmit said identified data to a second of said plurality of receiver stations according to a transmission schedule and to cause

one of said first and said second of said plurality of receiver stations to log transmission of said identified data;

transferring said at least one instruct signal to said at least one origination transmitter; and

transmitting one of a broadcast and a cablecast information transmission comprising said identified data and said at least one instruct signal.

14. (Unchanged) The method of claim 13, wherein one of (i) identification data and (ii) said at least one instruct signal is embedded in a television signal containing said data.

15. (Unchanged) The method of claim 13, wherein two of said plurality of receiver stations one of receives and responds to said at least one instruct signal concurrently.

16. (Unchanged) The method of claim 13, wherein each of said plurality of receiver stations responds to said at least one instruct signal at a different time.

17. (Unchanged) The method of claim 13, further comprising the steps of receiving said data at a receiver, communicating said data from said receiver to a memory location, and storing said data at said memory location for a period of time prior to communicating said data to one of said at least one origination transmitter and said intermediate transmitter.

18. (Unchanged) A method of communicating program material to a network of a plurality of receiver stations each of which includes one of a broadcast and a cablecast program receiver, an output device, a control signal detector, a processor operatively connected to said output device, with each said receiver station adapted to detect and respond to at least one instruct signal, wherein a first of said plurality of receiver stations further includes an intermediate transmitter, said method comprising the steps of:

receiving a program and delivering said program to at least one origination transmitter, wherein said program includes one of (i) audio and (ii) a command which executes processor instructions contained in said program;

receiving said at least one instruct signal wherein said at least one instruct signal is operative in said network to identify said program and transmit said identified program from said intermediate transmitter according to a transmission schedule and log transmission of said identified program from one of said at least one origination transmitter at said intermediate transmitter;

transferring said at least one instruct signal to said at least one origination transmitter; and

transmitting from said at least one origination transmitter an information transmission comprising said identified program and said at least one instruct signal.

19. (Unchanged) The method of claim 18, wherein one of (i) identification data and (ii) said at least one instruct signal is embedded in a mass medium program signal containing said program.

20. (Unchanged) The method of claim 18, wherein two of said plurality of receiver stations one of receive and respond to said at least one instruct signal concurrently.

21. (Unchanged) The method of claim 18, wherein each of said plurality of receiver stations responds to said at least one instruct signal at a different time.

22. (Unchanged) The method of claim 18, further comprising the steps of receiving said program at a receiver in a transmitter station, communicating said program from said receiver to a memory location, and storing said program at said memory location for a period of time prior to communicating said program to said intermediate transmitter.

23. (Unchanged) A method of controlling a network of a plurality of receiver stations each of which includes one of a broadcast and a cablecast signal receiver, at least one processor, a signal detector, said signal detector adapted to receive signals from one of a broadcast and a cablecast signal, and said processor programmed to respond to signals from said detector, with at least one of said plurality of receiver stations further including a transmitter, said method of controlling comprising the steps of:

receiving at one of a broadcast and a cablecast transmitter station an instruct signal which is effective at said plurality of receiver stations to transmit said instruct signal according to a transmission schedule and log transmission of said instruct signal;

transferring said instruct signal to a transmitter at said transmitter station;

receiving at least one control signal at said transmitter station, said at least one control signal designating at least one receiver station of said plurality of receiver stations to which said instruct signal is addressed; and

transferring said at least one control signal from said transmitter station to said transmitter at said transmitter station, said transmitter station one of broadcasting and cablecasting said instruct signal and said at least one control signal to said plurality of receiver stations;

thereby controlling a network of a plurality of receiver stations.

24. (Unchanged) The method of claim 23, wherein one of said instruct signal and said control signal is embedded in the non-visible portion of one of a television signal and one of a multichannel broadcast and a cablecast signal which contains video.

*Please add the following new claims.*

25. (New Claim) A method of processing signals in a network, said network having at least one transmitter station and at least one receiver station, said method comprising the steps of:

inputting a signal and a transmission schedule associated with said signal, said schedule comprising at least one of:

- (1) a time at which to transmit said signal; and
- (2) a channel on which to transmit said signal;

transmitting said signal according to said schedule;

selecting at least a portion of information communicated one of to said transmitter and from said transmitter; and

comparing said selected at least a portion of information to information of said schedule, thereby to determine proper transmission of said signal according to said schedule;

wherein said method processes signals in said network.

26. (New Claim) A method of processing signals to control a plurality of subscriber stations, each subscriber station having at least one processor, said method comprising the steps of:

receiving a programming signal which contains mass medium programming and communicating said programming signal to a storage device;

receiving at least one instruct signal which is effective to instruct said plurality of subscriber stations to compare information contained in said programming signal to a transmission schedule and transmit said programming signal according to said schedule;

selecting one of:

(1) a time to communicate a first instruct signal, said first instruct signal being one of said at least one instruct signal; and

(2) a storage location to which to communicate said first instruct signal to;

communicating said first instruct signal based on one of at said selected time and said selected storage location; and

storing said programming signal and said first instruct signal at said storage device;

wherein said method processes signals to control a plurality of subscriber stations.

27. (New Claim) The method of claim 26, further comprising the step of:

embedding said first instruct signal in said programming signal.

28. (New Claim) The method of claim 26, wherein said selected storage location is embedded in said programming signal at said storage device, said method further comprising the step of storing some information at said storage device that evidences at least one of:

- (1) a title of a television program;
- (2) an intended use of programming;
- (3) a transmission station;
- (4) a receiver station;
- (5) a network;
- (6) a broadcast station;
- (7) a channel on a cable system;
- (8) a time of transmission;
- (9) a identification of an instruct signal;
- (10) a source of data;
- (11) a publication;
- (12) an indication of copyright;
- (13) a supplier of data;
- (14) an article;
- (15) a publisher;
- (16) a distributor; and
- (17) an advertisement.

29. (New Claim) The method of claim 26, said method further comprising the steps of:

selecting a datum that performs at least one of:

- (1) identifying computer software in said programming signal;



(2) specifying some of a way to instruct receiver end equipment what specific programming to select one of to play and record other than that immediately at hand, how to load it on one of a player and recorder equipment, when and how to one of play it and record it other than immediately, how to modify it, one of what equipment, channel and channels to transmit it on, when to transmit it, and how and where to one of file it, refile it and dispose of it;

(3) designating an addressed apparatus;

(4) specifying at least one of where, when and how to locate a signal;

(5) informing a processor of a technique for identifying and processing a signal;

(6) enabling decryption;

(7) designating a communication schedule; and

embedding said selected datum in said programming signal.

30. (New Claim) The method of claim 26, wherein said storage device comprises a file storage medium wherein said programming signal and said first instruct signal are stored in a file on said file storage medium, said method further comprising the steps of:

selecting a second instruct signal, said second instruct signal being at least one of:

(1) a switch control signal;

(2) a timing control signal;

(3) a locating control signal;

(4) an instruct-to-contact signal that designates a remote receiver station;

(5) an instruct-to-transfer signal that designates programming;

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- (6) an instruct-to-delay signal that designates programming;
  - (7) one of an instruct-to-decrypt and an instruct-to-interrupt signal that designates programming and one of a method of decryption and interruption;
  - (8) one of an instruct-to-enable and an instruct-to-disable signal that designates an apparatus;
  - (9) an instruct-to-record signal that designates programming;
  - (10) an instruction signal that controls a multimedia presentation;
  - (11) an instruction signal that governs a receiver station environment;
  - (12) an instruct-to-power-on signal that designates a receiver;
  - (13) an instruct-to-tune signal that designates one of a receiver and a frequency;
  - (14) an instruct-to-coordinate signal that designates two apparatus;
  - (15) an instruct-to-compare signal that designates one of a news transmission and a computer input;
  - (16) an identifier signal that causes a computer to instruct a plurality of tuners each to tune to one of a broadcast and a cablecast transmission;
  - (17) an instruct-to-coordinate signal that designates multiple units of multimedia information and one of an output time and an output place;
  - (18) an instruct-to-generate signal that designates an output datum;

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- (19) an instruct-to-transmit signal that designates a computer output;
  - (20) an instruct-to-overlay signal that designates a video image;
  - (21) an instruct-that-if signal that designates a function to perform if a predetermined condition exists;
  - (22) an instruct-to-enable-and-deliver signal that designates information that supplements a video image;
  - (23) an instruct-to-transmit signal that designates a computer peripheral storage device;
  - (24) a code signal that designates a datum to one of remove and embed; and
  - (25) a signal addressed to a receiver station apparatus; and
- storing said selected second instruct signal in said file on said file storage medium.

31. (New Claim) A method of encoding signals to control at least one of a plurality of subscriber stations, each subscriber station having at least one processor, said method comprising the steps of:

- receiving and storing a program that contains video information;
- receiving an instruction, said instruction having effect at said plurality of subscriber stations to compare information communicated in said program to a transmission schedule and transmit said program according to said schedule;
- encoding said instruction, said step of encoding translating said instruction to a control signal, said control signal directing a processor at at least one of said subscriber stations to perform said transmission of said program and said information, said control signal interacting with predetermined subscriber

data, said predetermined subscriber data being specific for each of said plurality of subscriber stations; and

storing said control signal.

32. (New Claim) The method of claim 31, wherein supplemental program material is stored at the same location as said processor and said control signal directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further comprising the step of:

storing said supplemental program material in conjunction with said program and said control signal.

33. (New Claim) The method of claim 31, wherein said control signal directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further comprising the step of:

transmitting a combined video signal from said program and said video overlay generated by said processor to a plurality of receiver stations.

34. (New Claim) The method of claim 31, further comprising the steps of:

receiving a second instruction, said second instruction being one of:

(1) an instruction which is effective at at least one of said plurality of subscriber stations to generate some output to be associated with said program;

(2) an instruction which is effective at at least one of said plurality of subscriber stations to generate some output to be associated with at least one of a product, service and an information presentation;

(3) an instruction which is effective at at least one of said plurality of subscriber stations to display one of a combined and sequential

presentation of a mass medium programming presentation and a subscriber specific datum;

(4) an instruction which is effective at at least one of said plurality of subscriber stations to process a subscriber reply to said program;

(5) an instruction which is effective at at least one of said plurality of subscriber stations to one of communicate to a remote station a query in respect of information to be associated with said program;

(6) an instruction which is effective at at least one of said plurality of subscriber stations to control said at least one of said plurality of subscriber stations to receive information to supplement said program;

(7) an instruction which is effective at at least one of said plurality of subscriber stations to process a digital television signal; and

(8) an instruction which is effective at at least one of said plurality of subscriber stations to serve as a basis for one of (a) enabling an output device to display at least some of said program and (b) enabling a processor to process some downloadable code;

encoding said second instruction, said second step of encoding translating said second instruction to a second control signal, said second control signal for directing said processor; and

storing said second control signal.

35. (New Claim) The method of claim 31, further comprising the step of:

embedding said control signal in the non-visible portion of a television signal.

36. (New Claim) A method of communicating data and update material to a network, said network having a plurality of receiver stations each of

which includes a data receiver, a data storage device, a control signal detector, a computer, each of said plurality of receiver stations adapted to detect and respond to at least one instruct signal and to store said data for subsequent processing, and with at least one of said plurality of receiver stations further including an intermediate transmitter, said method of communicating comprising the steps of:

receiving said data to be transmitted at an origination station and delivering said data to an origination transmitter, said data including a plurality of images to be outputted at said receiver station in a predetermined sequence;

receiving said at least one instruct signal which is effective in said network to compare information contained in at least one of said data and said at least one instruct signal to a transmission schedule and transmit said data according to said schedule, said schedule effective to cause transmission of said plurality of images in said predetermined sequence;

transferring said at least one instruct signal to said origination transmitter; and

transmitting an information transmission comprising said data and said at least one instruct signal.

37. (New Claim) The method of claim 36, wherein at least one of said data and said at least one instruct signal is embedded in a television signal containing said data.

38. (New Claim) The method of claim 36, wherein said step of transmitting directs said information transmission to said plurality of receiver stations at the same time and each of said plurality of receiver stations one of receives and responds to said at least one instruct signal concurrently.

39. (New Claim) The method of claim 36, wherein said step of transmitting directs said information transmission to said plurality of receiver stations at different times and each of said plurality of receiver stations responds to said at least one instruct signal at a different time.

(New Claim) The method of claim 36, further comprising the steps of:  
receiving said data at said data receiver;  
communicating said data from said data receiver to a storage location; and  
storing said data at said storage location for a period of time prior to communicating said data to said origination transmitter.

41. (New Claim) A method of communicating a program to a network, said network having a plurality of receiver stations each of which includes a program receiver, an output device, a control signal detector, a processor operably connected to said output device, with each of said plurality of receiver stations adapted to detect and respond to at least one instruct signal, and with at least one of said plurality of receiver stations further including an intermediate transmitter, said method comprising the steps of:

receiving said program to be transmitted at an origination station and delivering said program to an origination transmitter, said program being mass medium programming including audio;

receiving said at least one instruct signal at said origination station, said at least one instruct signal in said network operates to compare information contained in at least one of said program and said at least one instruct signal to a transmission schedule and transmit said program according to said schedule;

transferring said at least one instruct signal to said origination transmitter;  
and

transmitting from said origination station an information transmission comprising said program and said at least one instruct signal.

42. (New Claim) The method of claim 41, wherein at least one of identification data and said at least one instruct signal is embedded in a mass medium program signal containing said program.

43. (New Claim) The method of claim 41, wherein said step of transmitting directs said information transmission to said plurality of receiver stations at the same time and each of said plurality of receiver stations one of receives and responds to said at least one instruct signal concurrently.

44. (New Claim) The method of claim 41, wherein said step of transmitting directs said information transmission to said plurality of receiver stations at different times and each of said plurality of receiver stations responds to said at least one instruct signal at a different time.

45. (New Claim) The method of claim 41, further comprising the steps of:

receiving said program at a program receiver in said origination station;  
communicating said program from said program receiver to a storage location; and

storing said program at said storage location for a period of time prior to communicating said program to said origination transmitter.

46. (New Claim) A method of controlling a network, said network comprising a plurality of receiver stations each of which includes a signal receiver, at least one processor, a signal detector, and said processor being programmed to respond to signals received from said signal detector, with at least one of said plurality of receiver stations further including a transmitter, said method comprising the steps of:



receiving at an origination station an instruct signal which is effective at said plurality of receiver stations to compare information contained in said instruct signal to a transmission schedule and transmit said instruct signal according to said schedule;

transferring said instruct signal from said origination station to said origination transmitter;

receiving at least one control signal at said origination station, said control signal designating at least one receiver station of said plurality of receiver stations to which said instruct signal is addressed; and

transferring said at least one control signal from said origination station to said origination transmitter, said origination station transmitting said instruct signal and said at least one control signal to said plurality of receiver stations.

47. (New Claim) The method of claim 46, wherein at least one of said instruct signal and said control signal is embedded in the non-visible portion of one of a) a television signal and b) one of a multichannel broadcast and cablecast signal which contains video.

48. (New Claim) The method of claim 26, further comprising the step of:

embedding a code in said programming signal that enables said processor to control a presentation of said mass medium programming in accordance with said first instruct signal.

49. (New Claim) The method of claim 26, further comprising the steps of: communicating a program identification code to said storage device and

storing said program identification code at a storage location associated with said programming signal.

50. (New Claim) The method of claim 26, further comprising the steps of:

communicating to and storing at said storage device regarding one of an availability and use of one of said programming signal and said mass medium programming at said subscriber station.

51. (New Claim) The method of claim 26, further comprising the steps of:

communicating to and storing at said storage device a second instruct signal which is effective at said subscriber station to generate output to be associated with at least one of said programming signal and said mass medium.

52. (New Claim) The method of claim 26, further comprising the steps of:

communicating to and storing at said storage device a second instruct signal which is effective to generate output to be associated with at least one of a product and service, said at least one of a product and service being offered in said mass medium programming.

53. (New Claim) The method of claim 26, further comprising the steps of:

communicating to and storing at said storage device a second instruct signal which is effective to display one of a combined presentation and

sequential presentation of a mass medium program and a subscriber specific datum.

54. (New Claim) The method of claim 26, further comprising the steps of:

communicating to and storing at said storage device a second instruct signal which is effective to process a subscriber reply to said mass medium.

55. (New Claim) The method of claim 26, further comprising the steps of:

communicating to and storing at said storage device a second instruct signal which is effective to perform one of (a) communicate to a remote station a query in respect of information to be associated with said programming signal and (b) to enable the display of said mass medium programming.

56. (New Claim) The method of claim 26, further comprising the steps of:

communicating to and storing at said storage device a second instruct signal which is effective to control said subscriber station to receive information to supplement one of said programming signal and said mass medium programming.

57. (New Claim) The method of claim 26, further comprising the steps of:

communicating to and storing at said storage device a second instruct signal which is effective to process a digital television signal.

58. (New Claim) The method of claim 26, further comprising the steps of:

communicating to and storing at said storage device at least one of code and a datum to serve as a basis for one of (a) enabling an output device to display at least a portion of said mass medium programming and (b) enabling a processor to process some downloadable code.

59. (New Claim) The method of claim 31, wherein supplemental program material is stored at the same location as said processor and said control signal directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further comprising the step of:

storing a second control signal in conjunction with said program and said control signal from said step of encoding, said second control signal having effect at at least one of said plurality of subscriber stations to one of query a remote station and receive said supplemental program material in one of a broadcast and a cablecast transmission.

60. (New Claim) The method of claim 31, wherein said control directs said processor to generate a video overlay that is coordinated with said video information in said program, said method comprising the step of:

transmitting a combined video signal from said program and said video overlay generated by said processor to a co-located video display.

61. (New Claim) The method of claim 31, further comprising the step of:

embedding a code in said program that enables one of a computer and a controller to control a presentation of said program in accordance with said control signal.

62. (New Claim) The method of claim 31, further comprising the steps of:

communicating a program identification code and storing said program identification code at a storage location associated with said program.

63. (New Claim) The method of claim 31, further comprising the steps of:

communicating to and storing at a storage location associated with said program information to evidence one of an availability and use of said program at at least one of said plurality of subscriber stations.

64. (New Claim) A method of processing a signal in a system having at least one transmitter station and at least one subscriber station, said method comprising the steps of:

inputting to said at least one transmitter station said signal, said signal including programming and an identification datum;

inputting to said at least one transmitter station a transmission schedule, said schedule including at least one of:

- (1) a time at which to transmit said signal; and
- (2) a channel on which to transmit said signal;

transmitting said signal from said transmitter station according to said schedule based on a comparison performed with said identification datum;

processing said signal to gather at least one statistic on an availability, use or usage of said programming at said at least one subscriber station; and

identifying said signal at said at least one subscriber station on the basis of said identification datum.

65. (New Claim) A method of communicating signals to control a plurality of user stations, each user station having a processor and being one of a transmitter station and a receiver station, said method comprising the steps of:

receiving a programming signal which contains mass medium programming and communicating said programming signal to a storage device;

receiving at least one first instruct signal which is effective to instruct said transmitter station to transmit said programming signal and said first instruct signal according to a transmission schedule and said receiver station to identify said programming signal;

selecting one of the group consisting of:

(1) a time at which to communicate said at least one first instruct signal; and

(2) a memory location in said storage device to which to communicate said at least one first instruct signal;

communicating said at least one first instruct signal at said selected time or to said selected memory location; and

storing said programming signal and said at least one first instruct signal at said storage device.

66. (New Claim) The method of claim 65, further comprising one step from the group consisting of:

embedding said at least one first instruct signal in said programming signal;

embedding a code in said programming signal that enables a processor to control a presentation of said mass medium programming contained in said programming signal in accordance with said at least one first instruct signal;

communicating a program unit identification code to said storage device and storing said program unit identification code at a memory location associated with said programming signal;

communicating to and storing at said storage device some information to evidence an availability, use, or usage of said programming signal or said mass medium programming contained in said programming signal at a user station;

communicating to and storing at said storage device a second instruct signal which is effective at a user station to generate some output to be associated with said programming signal or said mass medium programming contained in said programming signal;

communicating to and storing at said storage device a second instruct signal which is effective to generate some output to be associated with a product, service, or information presentation;

communicating to and storing at said storage device a second instruct signal which is effective to display a combined or sequential presentation of a mass medium program and a user specific datum;

communicating to and storing at said storage device a second instruct signal which is effective to process a user reaction to said mass medium programming contained in said programming signal;

communicating to and storing at said storage device a second instruct signal which is effective to communicate to a remote station a query for

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information to be associated with said programming signal or to enable display of said mass medium programming contained in said programming signal;

communicating to and storing at said storage device a second instruct signal which is effective to control a user station to receive information to supplement said programming signal or said mass medium programming contained in said programming signal;

communicating to and storing at said storage device a second instruct signal which is effective to process a digital television signal; and

communicating to and storing at said storage device a code or datum to serve as a basis for enabling an output device to display at least some of said mass medium programming contained in said programming signal or for enabling a processor to process some processor code.

67. (New Claim) The method of claim 65, wherein said at least one first instruct signal is embedded on said programming signal at said storage device, said method further comprising the step of storing some information at said storage device that evidences one or more of:

- (1) a title of a television program;
- (2) a proper use of programming;
- (3) a transmission station;
- (4) a receiver station;
- (5) a network;
- (6) a broadcast station;
- (7) a channel on a cable system;
- (8) a time of transmission;
- (9) an identification of an instruct signal;
- (10) a source or supplier of data;



- (11) a distributor or an advertisement; and
- (12) an indication of copyright.

68. (New Claim) The method of claim 65, said method further comprising the steps of:

selecting one from the group consisting of:

- (1) a datum that identifies a unit of computer software in said programming signal;
  - (2) a datum that specifies some of a way to instruct receiver end equipment what specific programming to select to play or record other than that immediately at hand, how to load said specific programming on player or recorder equipment, when and how to play or record said specific programming other than immediately, how to modify said specific programming, what equipment or channel or channels to transmit said specific programming on, when to transmit said specific programming, and how and where to file or refile or dispose of said specific programming;
  - (3) a datum that designates an addressed apparatus;
  - (4) a datum that specifies where, when, or how to locate a signal;
  - (5) a datum that informs a processor of a fashion for identifying and processing a signal;
  - (6) a datum that is part of a decryption code; and
- embedding said selected one in said programming signal.

69. (New Claim) The method of claim 65, wherein said storage device comprises a file storage medium and said programming signal and said at least one first instruct signal are stored in a file on said file storage medium, said method further comprising the steps of:

selecting a second instruct signal, said second instruct signal being one from the group consisting of:

- (1) a switch control signal;
- (2) a timing control signal;
- (3) a locating control signal;
- (4) an instruct-to-contact signal that designates a remote receiver station;
- (5) an instruct-to-transfer signal that designates a unit of broadcast or cablecast programming;
- (6) an instruct-to-delay signal that designates a unit of broadcast or cablecast programming;
- (7) an instruct-to-decrypt or instruct-to-interrupt signal that designates a unit of programming and a way to decrypt or interrupt;
- (8) an instruct-to-enable or instruct-to-disable signal that designates an apparatus;
- (9) an instruct-to-record signal that designates a broadcast or cablecast program;
- (10) an instruction signal that controls a media presentation;
- (11) an instruction signal that governs a broadcast or cablecast receiver station environment;
- (12) an instruct-to-power-on signal that designates a receiver;
- (13) an instruct-to-tune signal that designates a receiver or a frequency;
- (14) an instruct-to-coordinate signal that designates two apparatus;

- Cont. TD 1*
- (15) an instruct-to-compare signal that designates a news transmission or a computer input;
  - (16) an identifier signal that causes a computer to instruct a plurality of tuners each to tune to a broadcast or cablecast transmission;
  - (17) an instruct-to-coordinate signal that designates two units of multimedia information and one of: (1) an output time and (2) an output place;
  - (18) an instruct-to-generate signal that designates an output datum;
  - (19) an instruct-to-transmit signal that designates a computer output;
  - (20) an instruct-to-overlay signal that designates a video image;
  - (21) an instruct signal that designates a function to perform if a predetermined condition exists;
  - (22) an instruct-to-enable-and-deliver signal that designates information that supplements a video image;
  - (23) an instruct-to-transmit signal that designates a computer peripheral storage device;
  - (24) a code signal that designates a datum to remove or embed;
- and
- (25) a signal addressed to a receiver station apparatus; and
- storing said selected second instruct signal in said file on said file storage medium.

70. (New/Claim) A method of encoding signals to control a plurality of user stations, each of said user stations being one of a transmitter station and a receiver station, comprising the steps of:

receiving and storing a program that contains video information;

receiving an instruction, said instruction being effective at said transmitter station to transmit said received and stored program according to a transmission schedule and at said receiver station to identify said received and stored program;

encoding said instruction, into a first control signal for directing a processor at at least one of said plurality of user stations, said first control signal interacting with predetermined user data, said predetermined user data being potentially different at each of said plurality of user stations; and

storing said first control signal in conjunction with said received and stored program.

71. (New Claim) The method of claim 70, wherein supplemental program material is stored at the same location as said processor and said first control signal directs said processor to generate a video overlay based on said supplemental material that is coordinated with said video information in said program, said method further comprising the step of

storing a second control signal in conjunction with said program and said first control signal, said second control signal having effect at a user station to query a remote station for said supplemental program material or to receive said supplemental program material in a broadcast or cablecast transmission.

72. (New Claim) The method of claim 70, wherein said first control signal directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further including one step from the group consisting of:

transmitting a combined video signal based on said program and said video overlay generated by said processor over a broadcast or cablecast network to a plurality of receiver stations; and

communicating a combined video signal from said program and said video overlay generated by said processor to a co-located video display.

73. (New Claim) The method of claim 70, further comprising the steps of:

receiving a second instruction, said second instruction being one of the group consisting of:

(1) an instruction which is effective at a user station to generate some output to be associated with said program;

(2) an instruction which is effective at a user station to generate some output to be associated with a product, service, or information presentation;

(3) an instruction which is effective at a user station to display a combined or sequential presentation of a mass medium program and user specific data;

(4) an instruction which is effective at a user station to process a user reaction to said program;

(5) an instruction which is effective at a user station to communicate to a remote station a query for information to be associated with said program or to enable display of said program;

(6) an instruction which is effective at a user station to receive information to supplement said program; and

(7) an instruction which is effective at a user station to serve as a basis for enabling an output device to display at least some of said program or for enabling a processor to process some processor code;

encoding said second instruction, said second step of encoding translating said second instruction to a second control signal for directing an ancillary

processor to perform said specified effect in accordance with said second instruction; and

storing said second control signal in conjunction with said program.

74. (New Claim) The method of claim 70, further having one step from the group consisting of:

embedding said first control signal in the non-visible portion of a television signal;

embedding a code in said program that enables a computer or controller to control a presentation of said program in accordance with said first control signal;

communicating a program unit identification code and storing said program unit identification code at a storage location associated with said program; and

communicating to and storing at a storage location associated with said program some information to evidence an availability, use, or usage of said program at a user station.

75. (New Claim) A method of communicating data and update material to a network of data receiver stations each of which includes a broadcast or cablecast data receiver, a data storage device, a control signal detector, a computer capable of processing data, and with each said data receiver stations adapted to detect and respond to instruct signals and to store data for subsequent processing, and with at least one of said plurality of data receiver stations further including a transmitter, said method of communicating comprising the steps of:

receiving data to be transmitted at an origination station and delivering said data to an origination transmitter;

receiving at least one instruct signal at said origination station which in said network is effective at said at least one of said data receiver stations to transmit said data according to a transmission schedule, and to identify said data;

transferring said at least one instruct signal to said origination transmitter; and

transmitting a broadcast or cablecast information transmission comprising said data and said at least one instruct signal.

76. (New Claim) The method of claim 75, wherein said at least one instruct signal is embedded in a television signal containing said data.

77. (New Claim) The method of claim 75, wherein said step of transmitting directs said broadcast or cablecast transmission to said plurality of data receiver stations at the same time and each of said plurality of receiver stations receives or responds to said at least one instruct signal concurrently.

78. (New Claim) The method of claim 75, wherein said step of transmitting directs said broadcast or cablecast transmission to said plurality of data receiver stations at different times and each of said plurality of receiver stations responds to said at least one instruct signal at a different time.

79. (New Claim) The method of claim 75, further comprising the steps of receiving said data at a receiver at said origination station, communicating said data unit from said receiver to a memory location, and storing said data unit at said memory location for a period of time prior to communicating said data unit to said origination transmitter.

80. (New Claim) A method of communicating program material to a network of receiver stations each of which includes a broadcast or cablecast program receiver, an output device, a control signal detector, a processor

operably connected to said output device, with each receiver station adapted to detect and respond to instruct signals, and with at least one of said plurality of receiver stations further including a transmitter, said method of communicating comprising the steps of:

receiving a program to be transmitted at an origination station and delivering said program to an origination transmitter;

receiving at least one instruct signal at said origination station, said at least one instruct signal effective in said network at said at least one of said receiver stations to transmit said program according to a transmission schedule and to identify said program;

transferring said at least one instruct signal to said origination transmitter; and

transmitting from said origination station an information transmission comprising said program and said at least one instruct signal.

81. (New Claim) The method of claim 80, wherein said at least one instruct signal is embedded in a mass medium program signal containing said program.

82. (New Claim) The method of claim 80, wherein said step of transmitting directs said information transmission to said plurality of receiver stations at the same time and each of said plurality of receiver stations receives or responds to said at least one instruct signal concurrently.

83. (New Claim) The method of claim 80, wherein said step of transmitting directs said information transmission to said plurality of receiver stations at different times and each of said plurality of receiver stations responds to said one or more instruct signals at a different time.



84. (New Claim) The method of claim 80, further comprising the steps of receiving said program at a receiver at said origination station, communicating said program from said receiver to a memory location, and storing said program at said memory location for a period of time prior to communicating said program to said origination transmitter.

85. (New Claim) A method of controlling a network of receiver stations each of which includes a broadcast or cablecast signal receiver, at least one processor, a signal detector adapted to detect signals in a broadcast or cablecast signal, and said processor programmed to respond to signals from said detector, with at least one of said plurality of receiver stations further including a transmitter, said method of controlling comprising the steps of:

receiving at an origination station an instruct signal which is effective at said at least one of said plurality of receiver stations to transmit said instruct signal according to a transmission schedule and to identify said instruct signal;

transferring said instruct signal from said origination station to an origination transmitter;

receiving at least one control signal at said origination station, said at least one control signal designating at least one receiver station to which said instruct signal is addressed; and

transferring said at least one control signal to said origination transmitter, said origination station broadcasting or cablecasting said instruct signal and said at least one control signal to said plurality of receiver stations.

86. (New Claim) The method of claim 85, wherein said instruct signal or said at least one control signal is embedded in the non-visible portion of a television signal or a multichannel broadcast or cablecast signal which contains video.

87. (New Claim) A method of processing signals comprising the steps of:

inputting a plurality of signals to a transmission station, each of said plurality of signals includes one of specific video programming, audio programming, and data programming and an identification datum;

inputting at said transmission station each of said plurality of signals to a switch with a plurality of output channels;

processing each signal of said plurality of signals in order to determine which of said one of a specific video programming, audio programming, and data programming is being input to said switch;

comparing said identification datum to predetermined data in order to determine when to transmit each signal of said plurality of signals; and

communicating an instruction to delay communication of a signal.

88. (New Claim) A method of processing signals to control one of a plurality of receiver stations and transmitter stations, each said plurality of receiver stations and transmitter stations having a processor, said method comprising the steps of:

receiving a programming signal which contains mass medium programming which contains audio and communicating said programming signal to a storage device;

receiving at least one instruct signal which is effective to instruct said one of said plurality of receiver stations and transmitter stations to identify said

programming signal by at least one of type and content and delay  
communication of said programming signal;

selecting at least one of the group consisting of:

(1) a time at which to communicate a first instruct signal of said  
at least one instruct signal; and

(2) a memory location in order to communicate said first  
instruct signal of said at least one instruct signal;

communicating said first instruct signal at one of said selected time and to  
said selected memory location; and

storing said programming signal and said first instruct signal at said  
storage device.

89. (New Claim) The method of claim 88, further comprising  
one of the steps of:

embedding said first instruct signal of said at least one instruct signal in  
said programming signal; and

embedding a code in said programming signal that enables said processor  
to control a presentation of said mass medium programming contained in said  
programming signal in accordance with said first instruct signal of said at least  
one instruct signal.

90. (New Claim) The method of claim 88, wherein said selected  
memory location is within said programming signal at said storage device, said  
method further comprising the step of storing information at said storage device  
that evidences at least one of:

- (1) a title of a television program;
- (2) a proper use of programming;
- (3) a transmission station;

- (4) a receiver station;
- (5) a network;
- (6) a broadcast station;
- (7) a channel on a cable system;
- (8) a time of transmission;
- (9) a identification of an instruct signal of said at least one  
instruct signal;
- (10) one of a source and supplier of data;
- (11) one of a publication, article, publisher, distributor, and an  
advertisement; and
- (12) an indication of copyright.

91. (New Claim) The method of claim 88, said method further  
comprising the steps of:

selecting datum consisting of one that:

- (1) identifies computer software in said programming signal;
- (2) instructs receiver end equipment one of what specific  
programming to select to one of play and record other than immediately, how to  
load said specific programming on one of player equipment and recorder  
equipment, when and how to one of play said specific programming and record  
said specific programming other than immediately, how to modify said specific  
programming, what one of equipment, channel, and channels to transmit said  
specific programming on, when to transmit said specific programming, and how  
and where to one of file said specific programming, refile said specific  
programming, and dispose of said specific programming;
- (3) designates an addressed apparatus;

(4) specifies one of where, when, and how to locate said programming signal;

(5) informs said processor of a fashion for identifying and processing said programming signal;

(6) is part of a decryption code;

(7) is a comparison datum that designates a communication schedule; and

embedding said selected one datum in said programming signal.

92. (New Claim) The method of claim 88, wherein said storage device comprises a file storage medium, said programming signal and said first instruct signal are stored in a file in said file storage medium, said method further comprising the steps of:

selecting a second instruct signal, said second instruct signal being one from the group consisting of:

(1) a switch control signal;

(2) a timing control signal;

(3) a locating control signal;

(4) an instruct-to-contact signal that designates a remote receiver station;

(5) an instruct-to-transfer signal that designates one of a unit of broadcast programming and cablecast programming;

(6) an instruct-to-delay signal that designates said one of a unit of broadcast programming and cablecast programming;

(7) one of an instruct-to-decrypt and an instruct-to-interrupt signal that designates a unit of programming and a way to one of decrypt and interrupt;

- (8) one of an instruct-to-enable and an instruct-to-disable signal that designates an apparatus;
- (9) an instruct-to-record signal that designates said one of a unit of broadcast programming and cablecast programming;
- (10) an instruction signal that controls a multimedia presentation;
- (11) a second instruction signal that governs one of a broadcast receiver station environment and a cablecast receiver station environment;
- (12) an instruct-to-power-on signal that designates a receiver;
- (13) an instruct-to-tune signal that designates one of said receiver and a frequency;
- (14) an instruct-to-coordinate signal that designates two apparatus;
- (15) an instruct-to-compare signal that designates one of a news transmission and a computer input;
- (16) an identifier signal that causes a computer to instruct a plurality of tuners each to tune to one of a broadcast transmission and a cablecast transmission;
- (17) an instruct-to-coordinate signal that designates two units of multimedia information and one of: (1) an output time and (2) an output place;
- (18) an instruct-to-generate signal that designates an output datum;
- (19) an instruct-to-transmit signal that designates said computer output;
- (20) an instruct-to-overlay signal that designates a video image;

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- (21) an instruct-that-if signal that designates a function to perform if a predetermined condition exists;
  - (22) an instruct-to-enable-and-deliver signal that designates information that supplements a video image;
  - (23) an instruct-to-transmit signal that designates a computer peripheral storage device;
  - (24) a code signal that designates a datum to one of remove and embed; and
  - (25) a signal addressed to a receiver station apparatus; and storing said selected second instruct signal in said file in said file storage medium.

93. (New Claim) A method of generating and encoding signals to control a plurality of receiver stations and transmitter stations comprising the steps of:

receiving and storing a program that contains at least one of video information and audio information;

receiving an instruction, said instruction having an effect at a series of said plurality of receiver stations and transmitter stations to identify said program by one of type and content and delay communication of said program, said series including firstly a transmitter station and secondly a receiver station;

encoding said instruction, said step of encoding includes translating said instruction to a control signal, said control signal directs a processor at each one of said plurality of receiver stations and transmitter stations to perform said effect indicated by said instruction to identify said program, said control signal interacting with predetermined user data, said predetermined user data being

potentially different at each of said plurality of receiver stations and transmitter stations; and

storing said control signal in conjunction with said program based on said step of encoding.

94. (New Claim) The method of claim 93, wherein supplemental program material is stored at said processor, said control signal, based on said step of encoding, directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further comprising one step of the group consisting of:

storing said supplemental program material in conjunction with said program and said control signal; and

storing a second control signal in conjunction with said program and said control signal based on said step of encoding, said second control signal effecting at least one of said plurality of said receiver stations and transmitter stations to one of query a remote station and receive said supplemental program material in one of a broadcast transmission and a cablecast transmission.

95. (New Claim) The method of claim 93, wherein said control signal based on said step of encoding directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further comprising one step of the group consisting of:

transmitting a combined video signal from said program and said video overlay generated by said processor over one of a broadcast network and a cablecast network to a plurality of receiver stations; and

transmitting said combined video signal from said program and said video overlay generated by said processor to a co-located video display.



96. (New Claim) The method of claim 93, further comprising the steps of:

receiving a second instruction, said second instruction having an effect at one of said plurality of receiver stations and transmitter stations consisting of one of:

- 100-101
- (1) to generate output to be associated with said program;
  - (2) to generate output to be associated with one of a product, a service, and an information presentation;
  - (3) to display one of a combined and a sequential presentation of one of a mass medium program and a user specific datum;
  - (4) to process a user reaction to said program;
  - (5) to communicate to a remote station one of a query of information one of to be associated with said program and to enable display of said program;
  - (6) to control said at least one of said plurality of receiver stations and transmitter stations to receive information to supplement said program;
  - (7) to process a digital television signal; and
  - (8) to serve as a basis for enabling an output device to display one of at least a portion of said program and for enabling said processor to process an executable code.

encoding said second instruction, said second step of encoding includes translating said second instruction to a second control signal, said second control signal for directing said processor to perform said effect indicated by said second instruction with said program; and

storing said second control signal from said second step of encoding in conjunction with said program.

97. (New Claim) The method of claim 93, further having one of the group consisting of:

embedding said control signal in a non-visible portion of a television signal;

embedding a code in said program that enables one of a computer and a controller to control a presentation of said program in accordance with said control signal;

communicating a program unit identification code and storing said program unit identification code at a storage location associated with said program; and

communicating to and storing at said storage location associated with said program information to evidence one of an availability, a use, and usage of said program at said plurality of receiver stations and transmitter stations.

98. (New Claim) A method of communicating data and updating material to a network of a plurality of data receiver stations each of said plurality of data receiver stations includes one of a broadcast data receiver and a cablecast data receiver, a data storage device, a control signal detector, a computer capable of processing data, each of said plurality of receiver stations adapted to detect and respond to at least one instruct signal and to store said data for subsequent processing, at least one data receiver station of said plurality of data receiver stations further including one of a broadcast transmitter and a cablecast transmitter, said method of communicating comprising the steps of:

(1) receiving said data to be transmitted and delivering said data to at least one of an origination broadcast transmitter and an origination cablecast transmitter;

(2) receiving said at least one instruct signal which is effective to identify said data by one of type and content and causes a series of said plurality of receiver stations and transmitter stations to delay communication of said data, said series including firstly a transmitter station and secondly a receiver station;

(3) transferring said at least one instruct signal to said one of an origination broadcast transmitter and an origination cablecast transmitter; and

(4) transmitting one of a broadcast information transmission and a cablecast information transmission comprising said data and said at least one instruct signal.

99. (New Claim) The method of claim 98, wherein one of identification data and said at least one instruct signal are embedded in a television signal containing said identification data.

100. (New Claim) The method of claim 98, wherein said step of transmitting directs said one of a broadcast information transmission and a cablecast information transmission to said plurality of receiver stations at the same time and each of said plurality of receiver stations one of receives and responds to said at least one instruct signal concurrently.

101. (New Claim) The method of claim 98, wherein said step of transmitting directs said one of a broadcast information transmission and a cablecast information transmission to said plurality of receiver stations at different times and each of said plurality of receiver stations responds to said at least one instruct signal at a different time.

102. (New Claim) The method of claim 98, further comprising the steps of receiving said data at a receiver in one of a broadcast transmitter station and a cablecast transmitter station, communicating said data from said receiver to a memory location, and storing said data at said memory location for a period of time prior to communicating said data to a transmitter of said one of a broadcast transmitter station and a cablecast transmitter station.

103. (New Claim) A method of communicating program material to a network of a plurality of receiver stations each of said plurality of receiver stations includes one of a broadcast program receiver and a cablecast program receiver, an output device, a control signal detector, a processor operably connected to said output device, with each of said plurality of receiver stations adapted to detect and respond to at least one instruct signal, at least one of said plurality of receiver stations further including a transmitter, said method of communicating comprising the steps of:

- (1) receiving a program to be transmitted at a transmitter station and delivering said program to a transmitter at said transmitter station;
- (2) receiving said at least one instruct signal at said transmitter station, said at least one instruct signal operates to identify said program by one of type and content and causes a series of said plurality of receiver stations and transmitter stations to delay communication of said program, said series including firstly a transmitter station and secondly a receiver station;
- (3) transferring said at least one instruct signal to said transmitter; and
- (4) transmitting from said transmitter station an information transmission comprising said program and said at least one instruct signal.

104. (New Claim) The method of claim 103, wherein one of identification data and said at least one instruct signal are embedded in a mass medium program signal containing said program.

105. (New Claim) The method of claim 103, wherein said step of transmitting directs said information transmission to said plurality of receiver stations at the same time and each of said plurality of receiver stations one of receives and responds to said at least one instruct signal concurrently.

106. (New Claim) The method of claim 103, wherein said step of transmitting directs said information transmission to said plurality of receiver stations at different times and each of said plurality of receiver stations responds to said at least one instruct signal at a different time.

107. (New Claim) The method of claim 103, further comprising the steps of receiving said program at a receiver in said transmitter station, communicating said program from said receiver to a memory location, and storing said program at said memory location for a period of time prior to communicating said program to said transmitter.

108. (New Claim) A method of controlling a network of a plurality of receiver stations each of said plurality of receiver stations includes one of a broadcast signal receiver and a cablecast signal receiver, at least one processor, a signal detector, said signal detector adapted to receive one of a broadcast signal and a cablecast signal from said broadcast signal receiver and said cablecast signal receiver, and said processor programmed to respond to said one of a broadcast signal and a cablecast signal from said detector, with at least one receiver station of said plurality of receiver stations further including a transmitter, said method of controlling comprising the steps of:

(1) receiving at one of a broadcast transmitter station and a cablecast transmitter station at least one instruct signal which is effective at said plurality of receiver stations to identify said at least one instruct signal by one of type and content and causes a series of said plurality of receiver stations and transmitter stations to delay communication of said at least one instruct signal, said series including firstly a transmitter station and secondly a receiver station;

(2) transferring said at least one instruct signal from said one of a broadcast transmitter station and a cablecast transmitter station to a transmitter of said one of a broadcast transmitter station and a cablecast transmitter station;

(3) receiving at least one control signal at said one of a broadcast transmitter station and a cablecast transmitter station, said at least one control signal which designates said at least one receiver station of said plurality of receiver stations in which said at least one instruct signal is addressed; and

(4) transferring said at least one control signal from said one of a broadcast transmitter station and a cablecast transmitter station to said transmitter of said one of a broadcast transmitter station and a cablecast transmitter station, and transmitting said at least one instruct signal and said at least one control signal to said plurality of receiver stations.

109. (New Claim) The method of claim 108, wherein one of said at least one instruct signal and said at least one control signal is embedded in one of a non-visible portion of a television signal and one of a multichannel broadcast signal and a cablecast signal which contains video.

110. (New Claim) The method of claim 88, further comprising one of the steps of: communicating a program unit identification code to said storage device and storing said program unit identification code at a storage location associated with said programming signal; and

communicating to and storing at said storage device information to evidence one of an availability, a use, and usage of one of said programming signal and said mass medium programming contained in said programming signal at one of said plurality of receiver stations and transmitter stations.

111. (New Claim) The method of claim 88, further comprising the step of: communicating to and storing at said storage device a second instruct signal of said at least one instruct signal which is effective at a user station to generate output to be associated with said one of said programming signal and said mass medium programming contained in said programming signal at a user station of said plurality of receiver stations and transmitter stations.

112. (New Claim) The method of claim 88, further comprising one of the steps of: communicating to and storing at said storage device a second instruct signal of said at least one instruct signal which is effective to generate output to be associated with one of a product, a service, and an information presentation.

113. (New Claim) The method of claim 88, further comprising one of the steps of: communicating to and storing at said storage device a second instruct signal of said at least one instruct signal which is effective to display one of a combined and a sequential presentation of said mass medium program and a user specific datum.

114. (New Claim) The method of claim 88, further comprising one of the steps of: communicating to and storing at said storage device a second instruct signal of said at least one instruct signal which is effective to process a user reaction to said mass medium programming contained in said programming signal.

115. (New Claim) The method of claim 88, further comprising one of the steps of: communicating to and storing at said storage device a second instruct signal of said at least one instruct signal which is effective to communicate to a remote station a query of information one of to be associated with said programming signal and to enable display of said mass medium programming contained in said programming signal.

116. (New Claim) The method of claim 88, further comprising one of the steps of: communicating to and storing at said storage device a second instruct signal of said at least one instruct signal which is effective to control a user station to receive information to supplement said one of said programming signal and said mass medium programming contained in said programming signal.

117. (New Claim) The method of claim 88, further comprising one of the steps of: communicating to and storing at said storage device a second instruct signal of said at least one instruct signal which is effective to process a digital television signal.

118. (New Claim) The method of claim 88, further comprising the step of:

communicating to and storing at said storage device one of a code and datum to serve as a basis for enabling an output device one of to display at least a portion of said mass medium programming contained in said programming signal and for enabling said processor to process some executable code.

code.

119. (New Claim) A method of processing a plurality of signals comprising the steps of:



inputting said plurality of signals to a transmission station, each signal of said plurality of signals comprising an identification datum and at least one of video programming, audio programming and data programming ;

inputting said each signal at said transmission station to a switch having a plurality of output channels;

processing said each signal to determine (i) which ones of said at least one of said video programming, said audio programming and said data programming comprise said each signal and (ii) when to transmit said each signal;

selecting at least one of said plurality of signals to delay communication thereof; and

transmitting said plurality of signals to a processor in a field distribution system, said processor having a plurality of output ports;

communicating said plurality of signals to at least one remote geographic location ;

determining that the transmission of a specific signal of said plurality of signals should be delayed;

selecting a storage location; and

communicating said specific signal to said selected storage location.

120. (New Claim) A method of processing signals to control a plurality of user stations, each user station of said plurality of user stations having a processor, said method comprising the steps of:

receiving, at an origination station, a programming signal which contains mass medium programming that includes audio;

communicating said programming signal to a storage device;

receiving, at said origination station, at least one instruct signal which is effective to instruct at least two of said plurality of user stations to delay communication of at least a portion of said programming signal at said at least two of said plurality of user stations, the duration of said delay being one of (i) the same and (ii) different for two of said at least two of said plurality of user stations;

selecting at least one of the group consisting of:

(1) a time at which to communicate a first instruct signal of said at least one instruct signal; and

(2) a memory location to which to communicate a first instruct signal of said at least one instruct signal;

communicating said first instruct signal according to said selected at least one of said time and said memory location; and

storing said programming signal and said first instruct signal at said storage device.

121. (New Claim) The method of claim 120, further comprising one of the steps of:

embedding said first instruct signal in said programming signal;

embedding a code in said programming signal that enables a processor to control a presentation of said mass medium programming contained in said programming signal in accordance with said first instruct signal;

communicating a program unit identification code to said storage device and storing said program unit identification code at a storage location associated with said programming signal;

communicating to and storing at said storage device some information to evidence one of an availability, a use, and a usage of one of said programming

signal and said mass medium programming contained in said programming signal at one of said plurality of user stations;

communicating to and storing at said storage device a second instruct signal which is effective at a user station to generate some output to be associated with one of said programming signal and said mass medium programming contained in said programming signal;

communicating to and storing at said storage device a second instruct signal which is effective to generate some output to be associated with a product, service, or information presentation;

communicating to and storing at said storage device a second instruct signal which is effective to display a combined or sequential presentation of a mass medium program and a user specific datum;

communicating to and storing at said storage device a second instruct signal which is effective to process a user reaction to said mass medium programming contained in said programming signal;

communicating to and storing at said storage device a second instruct signal which is effective to communicate to a remote station a query in respect of information to be associated with said programming signal or to enable display of said mass medium programming contained in said programming signal;

communicating to and storing at said storage device a second instruct signal which is effective to control a user station to receive information to supplement said programming signal or said mass medium programming contained in said programming signal;

communicating to and storing at said storage device a second instruct signal which is effective to process a digital television signal which is separately defined from standard analog television; and

communicating to and storing at said storage device a code or datum to serve as a basis for enabling an output device to display at least some of said mass medium programming contained in said programming signal or for enabling a processor to process some executable code.

122. (New Claim) The method of claim 120, wherein said selected memory location is within said programming signal at said storage device, said method further comprising the step of storing some information at said storage device that evidences at least one of:

- am-120*
- (1) a title of a television program;
  - (2) a proper use of programming;
  - (3) a transmission station;
  - (4) a receiver station;
  - (5) a network;
  - (6) a broadcast station;
  - (7) a channel on a cable system;
  - (8) a time of transmission;
  - (9) a identification of an instruct signal of said at least one instruct signal;
  - (10) one of a source and supplier of data;
  - (11) one of a publication, article, publisher, distributor, and an advertisement; and
  - (12) an indication of copyright.

123. (New Claim) The method of claim 120, said method further comprising the steps of:

selecting one from the group consisting of:

(1) a datum that identifies computer software in said programming signal;

(2) a datum that instructs receiver end equipment of one of what specific programming to select to one of play and record other than that immediately at hand, how to load said specific programming on one of player equipment and recorder equipment, when and how to one of play said specific programming and record said specific programming other than immediately, how to modify said specific programming, what one of equipment, channel and channels to transmit said specific programming on, when to transmit said specific programming, and how and where to one of file said specific programming, or refile said specific programming, and dispose of said specific programming;

(3) a datum that designates an addressed apparatus;

(4) a datum that specifies one of where, when, and how to locate said programming signal;

(5) a datum that informs said processor of a fashion for identifying and processing said programming signal;

(6) a datum that is part of a decryption code;

(7) a comparison datum that designates a communication schedule; and

embedding said selected one in said programming signal.

124. (New Claim) The method of claim 120, wherein said storage device comprises a file storage medium, said programming signal and said first instruct signal are stored in a file in said file storage medium, said method further comprising the steps of:

selecting a second instruct signal, said second instruct signal being one from the group consisting of:

- (1) a switch control signal;
- (2) a timing control signal;
- (3) a locating control signal;
- (4) an instruct-to-contact signal that designates a remote receiver station;
- (5) an instruct-to-transfer signal that designates one of a unit of broadcast programming and cablecast programming;
- (6) an instruct-to-delay signal that designates said one of a unit of broadcast programming and cablecast programming;
- (7) one of an instruct-to-decrypt and instruct-to-interrupt signal that designates a unit of programming and a way to one of decrypt and interrupt;
- (8) one of an instruct-to-enable and an instruct-to-disable signal that designates an apparatus;
- (9) an instruct-to-record signal that designates one of broadcast programming and cablecast programming;
- (10) an instruction signal that controls a multimedia presentation;
- (11) an instruction signal that governs one of a broadcast receiver station environment and a cablecast receiver station environment;
- (12) an instruct-to-power-on signal that designates a receiver;
- (13) an instruct-to-tune signal that designates one of a receiver a frequency;

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- (14) an instruct-to-coordinate signal that designates two apparatus;
  - (15) an instruct-to-compare signal that designates one of a news transmission and a computer input;
  - (16) an identifier signal that causes a computer to instruct a plurality of tuners each to tune to one of a broadcast transmission and a cablecast transmission;
  - (17) an instruct-to-coordinate signal that designates two units of multimedia information and one of: (1) an output time and (2) an output place;
  - (18) an instruct-to-generate signal that designates an output datum;
  - (19) an instruct-to-transmit signal that designates a computer output;
  - (20) an instruct-to-overlay signal that designates a video image;
  - (21) an instruct-that-if signal that designates a function to perform if a predetermined condition exists;
  - (22) an instruct-to-enable-and-deliver signal that designates information that supplements a video image;
  - (23) an instruct-to-transmit signal that designates a computer peripheral storage device;
  - (24) a code signal that designates a datum to one of remove and embed; and
  - (25) a signal addressed to a receiver station apparatus; and
- storing said selected second instruct signal in said file on said file storage medium.

125. (New Claim) A method of generating and encoding signals to control a plurality of receiver stations and transmitter stations comprising the steps of:

receiving and storing a program that contains at least one of video information and audio information;

receiving an instruction, said instruction having an effect at a series of said plurality of receiver stations and transmitter stations, said series including firstly a transmitter station and, secondly, a receiver station, said effect being to delay communication of at least a portion of said program at at least each of said transmitter station and said receiver station;

encoding said instruction, said step of encoding translating said instruction to a control signal, said control signal directs a processor at each one of said plurality of receiver stations and transmitter stations to perform said effect indicated by said instruction, said control signal interacting with predetermined user data, said predetermined user data being potentially different at each of said plurality of receiver stations and transmitter stations; and

storing said control signal in conjunction with said program.

126. (New Claim) The method of claim 125, wherein supplemental program material is stored said processor, said control signal, based on said step of encoding directs, said processor to generate a video overlay that is coordinated with said video information in said program, said method further comprising one step of the group consisting of:

storing said supplemental program material in conjunction with said program and said control signal; and



storing a second control signal in conjunction with said program and said control signal based on said step of encoding, said second control signal effecting at least one of said plurality of said receiver stations and transmitter stations to do one of (i) query a remote station and (ii) receive said supplemental program material in one of a broadcast transmission and a cablecast transmission.

127. (New Claim) The method of claim 125, wherein said control signal based on said step of encoding also directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further comprising one step of the group consisting of:

transmitting a combined video signal from said program and said video overlay generated by said processor over one of a broadcast network and a cablecast network to a plurality of receiver stations; and

transmitting said combined video signal from said program and said video overlay generated by said processor to a co-located video display.

128. (New Claim) The method of claim 125, further comprising the steps of:

receiving a second instruction, said second instruction having an effect at one of said plurality of receiver stations and transmitter stations consisting of one of:

- (1) to generate output to be associated with said program;
- (2) to generate output to be associated with one of a product, service, and information presentation;
- (3) to display one of a combined and a sequential presentation of one of a mass medium program and a user specific datum;
- (4) to process a user reaction to said program;

(5) to communicate to a remote station one of a query of information one of to be associated with said program and to enable display of said program;

(6) to control said at least one of said plurality of receiver stations and transmitter stations user station to receive information to supplement said program;

(7) to process a digital television signal ; and

(8) to serve as a basis for enabling an output device to display one of at least a portion of said program and for enabling said processor to process an executable code.

encoding said second instruction, said second step of encoding includes translating said second instruction to a second control signal, said second control signal for directing said processor to perform said effect indicated by said second instruction ; and

storing said second control signal from said second step of encoding in conjunction with said program.

129. (New Claim) The method of claim 125, further comprising one step of the group consisting of:

embedding said control signal in a non-visible portion of a television signal;

embedding a code in said program that enables one of a computer and a controller to control a presentation of said program in accordance with said control signal;

communicating a program unit identification code and storing said program unit identification code at a storage location associated with said program; and

communicating to and storing at said storage location associated with said program information to evidence one of an availability, a use, and a usage of said program at said plurality of receiver stations and transmitter stations.

130. (New Claim) A method of communicating data and update material to a plurality of stations, said plurality of stations including at least one intermediate data transmitter station and a plurality of data receiver stations, said at least one intermediate data transmitter station being in series with said plurality of data receiver stations, each data receiver station of said plurality of data receiver stations including one of a broadcast data receiver and a cablecast data receiver, a data storage device, a control signal detector, and a computer capable of processing said data, said each data receiver station adapted to detect and respond to at least one instruct signal and to store said data for subsequent processing, and with at least one of said plurality of data receiver stations further including a transmitter, said method of communicating comprising the steps of:

- (1) receiving, at an origination station, said data;
- (2) delivering said data to an origination transmitter;
- (3) receiving, at said origination station, said at least one instruct signal, said at least one instruct signal having effect at each of (i) said at least one intermediate data transmitter station and (ii) said plurality of data receiver stations to delay communication of at least a portion of said data at each of (i) said at least one intermediate data transmitter station and (ii) at least one of said plurality of data receiver stations ;
- (4) transferring said at least one instruct signal to said origination transmitter; and

(5) transmitting one of a broadcast information transmission and a cablecast information transmission, said information transmission comprising said data and said at least one instruct signal.

131. (New Claim) The method of claim 130, wherein one of identification data and said at least one instruct signal is embedded in a television signal that contains said data.

132. (New Claim) The method of claim 130, wherein said step of transmitting directs said information transmission to said plurality of data receiver stations at the same time and each of said plurality of data receiver stations does one of receives and responds to said at least one instruct signal concurrently.

133. (New Claim) The method of claim 130, wherein said step of transmitting directs said information transmission to said plurality of data receiver stations at different times and each of said plurality of data receiver stations responds to said at least one instruct signals at a different time.

134. (New Claim) The method of claim 130, further comprising the steps of:

receiving said data at a receiver in one of a broadcast transmitter station and a cablecast transmitter station,

communicating said data from said receiver to a memory location, and  
storing said data at said memory location for a period of time prior to communicating said data to said transmitter of said at least one of said plurality of data receiver stations.

135. (New Claim) A method of communicating program material to a plurality of stations, said plurality of stations including at least one intermediate transmitter station and a plurality of receiver stations, said at least one

intermediate transmitter station being in series with said plurality of receiver stations, each receiver station of said plurality of receiver stations including one of a broadcast program receiver and a cablecast program receiver, an output device, a control signal detector, and a processor operably connected to said output device, said each receiver station adapted to detect and respond to at least one instruct signal, with at least one of said plurality of receiver stations further including a transmitter, said method of communicating comprising the steps of:

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- (1) receiving, at a transmitter station, a program to be transmitted, said program including audio;
  - (2) delivering said program to a transmitter;
  - (3) receiving, at said transmitter station, said at least one instruct signal, said at least one instruct signal being effective at each of (i) said at least one intermediate transmitter station and (ii) said plurality of receiver stations to delay communication of at least a portion of said program at each of (i) said at least one intermediate transmitter station and (ii) at least one receiver station of said plurality of receiver stations;
  - (4) transferring said at least one instruct signal to said transmitter; and
  - (5) transmitting from said transmitter station an information transmission comprising said program and said at least one instruct signal.

136. (New Claim) The method of claim 135, wherein one of identification data and said at least one instruct signal is embedded in a mass medium program signal containing said program.

137. (New Claim) The method of claim 135, wherein said step of transmitting directs said transmission to said plurality of receiver stations at the

same time and each of said plurality of receiver stations does one of receives and responds to said at least one instruct signal concurrently.

138. (New Claim) The method of claim 135, wherein said step of transmitting directs said transmission to said plurality of receiver stations at different times and each of said plurality of receiver stations responds to said at least one instruct signal at a different time.

139. (New Claim) The method of claim 135, further comprising the steps of:

receiving said program at a receiver in said transmitter station,  
communicating said program from said receiver to a memory location,  
and

storing said program at said memory location for a period of time prior to communicating said program to a transmitter of said at least one of said plurality of receiver stations.

140. (New Claim) A method of controlling a network of a plurality of stations, said plurality of stations including at least one intermediate transmitter station and a plurality of receiver stations, said at least one intermediate transmitter station being in series with said plurality of receiver stations, each receiver station of said plurality of receiver stations including one of a broadcast signal receiver and a cablecast signal receiver, at least one processor, and a signal detector, said signal detector adapted to receive signals from one of a broadcast signal and a cablecast signal, said processor programmed to respond to signals from said detector, with at least one of said plurality of receiver stations further including a transmitter, said method of controlling comprising the steps of:

(1) receiving, at one of a broadcast transmitter station and a cablecast transmitter station, at least one instruct signal, said at least one instruct signal

being effective at each of (i) said at least one intermediate transmitter station and (ii) said plurality of receiver stations to delay communication of a least a portion of said instruct signal at each of (i) said at least one intermediate transmitter station and (ii) at least one receiver station of said plurality of receiver stations;

(2) transferring said at least one instruct signal from said transmitter station to a second transmitter;

(3) receiving at least one control signal at said transmitter station, said at least one control signal designating at least one station of said plurality of stations to which said at least one instruct signal is addressed;

(4) transferring said at least one control signal from said transmitter station to said second transmitter; and

(5) doing one of broadcasting and cablecasting said at least one instruct signal and said at least one control signal to said plurality of stations.

141. (New Claim) The method of claim 140, wherein one of said at least one instruct signal and said at least one control signal is embedded in a non-visible portion of one of a television signal that contains audio and a multichannel broadcast or cablecast that contains audio.

142. (New Claim) The method of claim 130, wherein said each data receiver station includes a selective transmission device.

143. (New Claim) The method of claim 130, wherein said data includes audio.

144. (New Claim) The method of claim 130, wherein said data includes television programming that includes audio and full motion video.

145. (New Claim) The method of claim 135, wherein said each receiver station includes a selective transmission device.

146. (New Claim) The method of claim 135, wherein said program includes television programming that includes audio and full motion video.

(New Claim) The method of claim 120, wherein said duration of said delay is of a predetermined period of time.

148. (New Claim) A method of processing a plurality of signals in a system that comprises at least one transmission station and at least one subscriber station, remote from said at least one transmission station, said method comprising the steps of:

programming said at least one subscriber station to store user data and select said plurality of signals on the basis of said user data;

inputting said plurality of signals to said at least one transmission station;

inputting a transmission schedule associated with said plurality of signals, said transmission schedule identifying a specific schedule for each of said plurality of signals, said specific schedule comprising for each scheduled signal at least two of:

- (1) a time at which to transmit said scheduled signal;
- (2) a channel on which to transmit said scheduled signal;

and

- (3) a code designating said scheduled signal;

transmitting at least one of said plurality of signals in response to said transmission schedule;

causing said at least one subscriber station to store at least one specific signal of said at least one of said plurality of signals based on said selection step based on said user data.



149. (New Claim) A method of processing signals to control operations in a system comprising at least one transmitter station and at least one receiver station, each station having a processor, said method comprising the steps of:

receiving a programming signal which contains mass medium programming containing audio and communicating said programming signal to a storage device;

receiving at least one instruct signal which is effective to instruct said at least one transmitter station to transmit said programming signal according to a schedule and at said at least one receiver station to store said programming signal;

selecting one of the group consisting of:

(1) a time at which to communicate a first of said at least one instruct signal; and

(2) a memory location to which to communicate a first of said at least one instruct signal;

communicating said first of said at least one instruct signal at said selected time or to said selected memory location; and

storing said programming signal and said first of said at least one instruct signal at said storage device.

150. (New Claim) The method of claim 149, further comprising one of the steps of:

embedding said first instruct signal in said programming signal;

embedding a code in said programming signal that enables a processor at one of said stations in said system to control a presentation of said mass medium programming contained in said programming signal in accordance with said first instruct signal;

communicating a program unit identification code to said storage device and storing said program unit identification code at a storage location in said storage device associated with said programming signal;

communicating to and storing at said storage device some information to evidence an availability, use, or usage of said programming signal or said mass medium programming contained in said programming signal at a user station;

communicating to and storing at said storage device a second instruct signal which is effective at a user station to generate some output to be associated with said programming signal or said mass medium programming contained in said programming signal;

communicating to and storing at said storage device a second instruct signal which is effective to generate some output to be associated with a product, service, or information presentation;

communicating to and storing at said storage device a second instruct signal which is effective to display a combined or sequential presentation of a mass medium program and user specific data;

communicating to and storing at said storage device a second instruct signal which is effective to process a user reaction to said mass medium programming contained in said programming signal;

communicating to and storing at said storage device a second instruct signal which is effective to communicate to a remote station a query regarding information to be associated with said programming signal or to enable display of said mass medium programming contained in said programming signal;

communicating to and storing at said storage device a second instruct signal which is effective to control a receiver station to receive information to

supplement said programming signal or said mass medium programming contained in said programming signal;

communicating to and storing at said storage device a second instruct signal which is effective to process a digital television signal; and

communicating to and storing at said storage device a code to serve as a basis for enabling an output device to display at least some of said mass medium programming contained in said programming signal or for enabling a processor at one of said stations in said system to process some executable code.

151. (New Claim) The method of claim 149, wherein said selected memory location is within said storage device, said method further comprising the step of storing some information at said storage device that evidences one or more of:

- (1) a title of a television program;
- (2) a proper use of programming;
- (3) a transmission station;
- (4) a receiver station;
- (5) a network;
- (6) a broadcast station;
- (7) a channel on a cable system;
- (8) a time of transmission;
- (9) an identification of an instruct signal;
- (10) a source or supplier of data;
- (11) a distributor an advertisement; and
- (12) an indication of copyright.

152. (New Claim) The method of claim 149, said method further comprising the steps of:

selecting one from the group consisting of:

- (1) a datum that identifies a unit of computer software in said programming signal;
- (2) a datum that specifies some of a way to instruct receiver end equipment what specific programming to select to play or record other than that immediately at hand, how to load it on player or recorder equipment, when and how to play it or record it other than immediately, how to modify it, what equipment or channel or channels to transmit it on, when to transmit it, and how and where to file it or refile it or dispose of it;
- (3) a datum that designates an addressed apparatus;
- (4) a datum that specifies where, when, or how to locate a signal;
- (5) a datum that informs a processor of at one of said stations in said system of a fashion for identifying and processing a signal;
- (6) a datum that is part of a decryption code;
- (7) a comparison datum that designates a communication schedule; and

embedding said selected one in said programming signal.

153. (New Claim) The method of claim 149, wherein said storage device comprises a file storage medium and said programming signal and said first instruct signal are stored in a file on said file storage medium, said method further comprising the steps of:

selecting a second instruct signal, said second instruct signal being one from the group consisting of:

- (1) a switch control signal;
- (2) a timing control signal;

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- (3) a locating control signal;
  - (4) an instruct-to-contact signal that designates a remote receiver station;
  - (5) an instruct-to-transfer signal that designates a unit of broadcast or cablecast programming;
  - (6) an instruct-to-delay signal that designates a unit of broadcast or cablecast programming;
  - (7) an instruct-to-decrypt or instruct-to-interrupt signal that designates a unit of programming and a way to decrypt or interrupt;
  - (8) an instruct-to-enable or instruct-to-disable signal that designates an apparatus;
  - (9) an instruct-to-record signal that designates a broadcast or cablecast program;
  - (10) an instruction signal that controls a media presentation;
  - (11) an instruction signal that governs a broadcast or cablecast receiver station environment;
  - (12) an instruct-to-power-on signal that designates a receiver;
  - (13) an instruct-to-tune signal that designates a receiver or a frequency;
  - (14) an instruct-to-coordinate signal that designates two apparatus;
  - (15) an instruct-to-compare signal that designates a news transmission or a computer input;
  - (16) an identifier signal that causes a computer to instruct a plurality of tuners each to tune to a broadcast or cablecast transmission;

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- (17) an instruct-to-coordinate signal that designates two units of multimedia information and one of: (1) an output time and (2) an output place;
  - (18) an instruct-to-generate signal that designates an output datum;
  - (19) an instruct-to-transmit signal that designates a computer output;
  - (20) an instruct-to-overlay signal that designates a video image;
  - (21) an instruct signal that designates a function to perform if a predetermined condition exists;
  - (22) an instruct-to-enable-and-deliver signal that designates information that supplements a video image;
  - (23) an instruct-to-transmit signal that designates a computer peripheral storage device;
  - (24) a code signal that designates a datum to remove or embed;
- and
- (25) a signal addressed to a receiver station apparatus; and
- storing said selected second instruct signal in said file on said file storage medium.

154. (New Claim) A method of encoding signals to control a plurality of potential user stations, each user station having a processor and being one of a transmitter station and a receiver station, comprising the steps of:

receiving and storing a program that contains video and audio information;

receiving an instruction, said instruction having effect at to control a transmitter station to transmit said program according to a schedule and a receiver station to store said program;

encoding said instruction, said step of encoding translating said instruction to a control signal, said control signal for directing a processor at one or more of said plurality of user stations to perform said effect indicated by said instruction, said control signal interacting with predetermined data at each of said user stations, said predetermined data being different at each of said plurality of user stations; and

storing said control signal in conjunction with said program.

155. (New Claim) The method of claim 154, wherein supplemental program material is stored at the same location as said processor and said control signal from said step of encoding also directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further comprising one step of the group consisting of:

storing said supplemental program material in conjunction with said program and said control signal; and

storing a second control signal in conjunction with said program and said control signal from said step of encoding, said second control signal having effect at a user station to query a remote station or receive said supplemental program material in a broadcast or cablecast transmission.

156. (New Claim) The method of claim 154, wherein said control signal from said step of encoding also directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further comprising one step of the group consisting of:

transmitting a combined video signal from said program and said video overlay generated by said processor over a broadcast or cablecast network to a plurality of receiver stations; and

transmitting a combined video signal from said program and said video overlay generated by said processor to a co-located video display.

157. (New Claim) The method of claim 154, further comprising the steps of:

receiving a second instruction, said second instruction being one of the group consisting of:

- (1) an instruction which is effective at a user station to generate some output to be associated with said program;
- (2) an instruction which is effective at a user station to generate some output to be associated with a product, service, or information presentation;
- (3) an instruction which is effective at a user station to display a combined or sequential presentation of a mass medium program and user specific data;
- (4) an instruction which is effective at a user station to process a user reaction to said program;
- (5) an instruction which is effective at a user station to communicate to a remote station a query in respect of information to be associated with said program or to enable display of said program;
- (6) an instruction which is effective at a user station to control a user station to receive information to supplement said program; and
- (7) an instruction which is effective at a user station to serve as a basis for enabling an output device to display at least some of said program or for enabling a processor to process some executable code.

encoding said second instruction, said second step of encoding translating said second instruction to a second control signal, said second control signal for



directing said processor to perform in accordance with said second instruction;  
and

storing said second control signal in conjunction with said program.

158. (New Claim) The method of claim 154, further having one step  
from the group consisting of:

embedding said control signal in the non-visible portion of a television  
signal;

embedding a code in said program that enables a computer or controller  
to control a presentation of said program in accordance with said control signal;

communicating a program unit identification code and storing said  
program unit identification code at a storage location associated with said  
program; and

communicating to and storing at a storage location associated with said  
program some information to evidence an availability, use, or usage of said  
program at a user station.

159. (New Claim) A method of communicating data and update  
material to a network of data receiver stations each of which includes a  
broadcast or cablecast data receiver, a data storage device, a control signal  
detector, a computer capable of processing data, and with receiver station  
adapted to detect and respond to instruct signals and to store data for  
subsequent processing, and with at least one of said plurality of data receiver  
stations further including a transmitter, said method of communicating  
comprising the steps of:

receiving data to be transmitted at an origination station and  
delivering said data to an origination transmitter;

receiving at least one of said instruct signals which in said network are effective to control at least one of said receiver stations to store said data and to transmit said data according to a schedule;

transferring said at least one of said instruct signals to said origination transmitter; and

transmitting a broadcast or cablecast information transmission comprising said data and said at least one of said instruct signals.

160. (New Claim) The method of claim 159, wherein some information identifying said data or said one or more instruct signals are embedded in a television signal containing said data.

161. (New Claim) The method of claim 159, wherein said step of transmitting directs said broadcast or cablecast transmission to said plurality of data receiver stations at the same time and each of said plurality receives or responds to said one or more instruct signals concurrently.

162. (New Claim) The method of claim 159, wherein said step of transmitting directs said broadcast or cablecast transmission to said plurality of receiver stations at different times and each of said plurality responds to said one or more of said instruct signals at a different time.

163. (New Claim) The method of claim 159, further comprising the step of receiving said data at a receiver, communicating said data from said receiver to a memory location, and storing said data at said memory location for a period of time prior to communicating said data to said origination transmitter.

164. (New Claim) A method of communicating program material to a network including a plurality of receiver stations each of which includes a broadcast or cablecast program receiver, an output device, a control signal detector, a processor operably connected to said output device, with each of said

plurality of receiver stations adapted to detect and respond to instruct signals, and with at least one of said plurality of receiver stations further including a transmitter, said method of communicating comprising the steps of:

receiving a program to be transmitted at an origination station and delivering said program to an origination transmitter;

receiving at least one of said instruct signals which in said network is effective to control said plurality of receiver stations to store said program and to transmit said program according to a schedule;

transferring said at least one of said instruct signals to said origination transmitter; and

transmitting from said origination station an information transmission comprising said program and said at least one of said instruct signals.

165. (New Claim) The method of claim 164, wherein some identification information identifying said program or said one or more instruct signals are embedded in a mass medium program signal containing said program.

166. (New Claim) The method of claim 164, wherein said step of transmitting directs said information transmission to said plurality of receiver stations at the same time and each of said plurality of receiver stations receives or responds to said one or more instruct signals concurrently.

167. (New Claim) The method of claim 164, wherein said step of transmitting directs said information transmission to said plurality of receiver stations at different times and each of said plurality of receiver stations responds to said one or more instruct signals at a different time.

168. (New Claim) The method of claim 164, further comprising the steps of receiving said program at a receiver, communicating said program from

said receiver to a memory location, and storing said program at said memory location for a period of time prior to communicating said program to said origination transmitter.

169. (New Claim) A method of controlling a network of a plurality of receiver stations each of which includes a broadcast or cablecast signal receiver, at least one processor, a signal detector, said signal detector adapted to detect signals in a broadcast or cablecast signal, and said processor programmed to respond to signals from said detector, with at least one of said plurality of receiver stations further including a transmitter, said method of controlling comprising the steps of:

receiving at an origination station an instruct signal which is effective at said plurality of receiver stations to control said plurality of receiver stations to store said instruct signal and said transmitter to transmit said instruct signal according to a schedule;

transferring said instruct signal from said origination station to an origination transmitter;

receiving at least one control signal at said origination station, said at least one control signal designating at least one receiver station of said plurality of receiver stations to which said instruct signal is addressed; and

transferring said at least one control signal from said origination station to said origination transmitter, said origination station broadcasting or cablecasting said instruct signal and said at least one control signal.

170. (New Claim) The method of claim 169, wherein said instruct signal or said at least one control signal is embedded in the non-invisible portion of a television or a multichannel broadcast or cablecast signal which contains video.

171. (New Claim) A method of processing signals in a system that comprises a transmission station and at least one remote subscriber station, said system having a first computer, said method comprising the steps of:

inputting a control signal at said transmission station;  
inputting a schedule associated with said control signal, said schedule designating at least two of:

- (1) a transmission time;
- (2) a transmission channel; and
- (3) an identifier;

communicating said control signal in accordance with said schedule at a time when information content does not exist;

inputting said control signal to at least said first computer based on said step of communicating;

generating said information content in response to said control signal, said information content including at least one of video, audio, and a graphic; and

causing a signal generator to add one of said control signal and said generated information content to an information transmission containing a television signal at either said television station or said at least one remote subscriber station.

172. (New Claim) A method of processing signals to control a plurality of user stations, each user station having at least one processor, said method comprising the steps of:

receiving a programming signal which contains mass medium programming and communicating said programming signal to a storage device;

receiving at least one instruct signal which is effective to instruct said plurality of user stations to: (a) generate information content to complete or

supplement said programming signal, (b) incorporate said generated information content into said programming signal, and (c) transmit to at least one of said plurality of user stations said programming signal and said information content, said information content comprising at least one of video, audio, and a graphic;

selecting one of:

(1) a time to communicate a first instruct signal, said first instruct signal being one of said at least one instruct signal; and

(2) a storage location to communicate said first instruct signal to;

communicating said first instruct signal based on one of said selected time and said selected storage location; and

storing said programming signal and said first instruct signal at said storage device.

173. (New Claim) The method of claim 172, further comprising one of the steps of:

embedding said first instruct signal in said programming signal;

embedding a code in said programming signal that enables a processor to control the presentation of said mass medium programming in accordance with said first instruct signal;

communicating a program identification code to said storage device and storing said program identification code at a storage location associated with said programming signal;

communicating to and storing at said storage device information regarding one of the availability, use, and usage of one of said programming signal and said mass medium programming at a user station;

communicating to and storing at said storage device a second instruct signal which is effective at a user station to generate output to be associated with one of said programming signal and said mass medium programming ;

communicating to and storing at said storage device a second instruct signal which is effective to generate output to be associated with one of a product and service, said one of a product and service being offered in said mass medium programming;

communicating to and storing at said storage device a second instruct signal which is effective to display one of a combined presentation and a sequential presentation of a mass medium program and a user specific datum;

communicating to and storing at said storage device a second instruct signal which is effective to process a user reaction to said mass medium programming ;

communicating to and storing at said storage device a second instruct signal which is effective to perform one of: (a) communicate to a remote station a query in respect of information to be associated with said programming signal , and (b) enable the display of said mass medium programming;

communicating to and storing at said storage device a second instruct signal which is effective to control a user station to receive information to supplement one of said programming signal and said mass medium programming;

communicating to and storing at said storage device a second instruct signal which is effective to process a digital television signal; and

communicating to and storing at said storage device code that: (a) serves as a basis for enabling an output device to display said mass medium programming, and (b) enables a processor to process said code.

174. (New Claim) The method of claim 172, wherein said first instruct signal is stored at a memory location that contains data embedded in said programming signal at said storage device, said method further comprising the step of storing in said data information that evidences at least one of:

- (1) a title of a television program;
- (2) an intended use of programming;
- (3) a transmission station;
- (4) a receiver station;
- (5) a network;
- (6) a broadcast station;
- (7) a channel on a cable system;
- (8) a time of transmission;
- (9) an identification of an instruct signal;
- (10) a source or supplier of data;
- (11) a distributor or advertisement; and
- (12) an indication of copyright.

175. (New Claim) The method of claim 172, said method further comprising the steps of:

selecting a datum that performs one of:

- (1) identifying computer software in said programming signal;
- (2) specifying some of a way to instruct receiver end equipment

what specific programming to select to play or record other than that immediately at hand, how to load it on player or recorder equipment, when and how to play it or record it other than immediately, how to modify it, what equipment or channel or channels to transmit it on, when to transmit it, and how and where to file it or refile it or dispose of it;



- (3) designating an addressed apparatus;
  - (4) specifying information related to locating a signal;
  - (5) informing a processor of a fashion for identifying and processing a signal;
  - (6) enabling decryption;
  - (7) designating a communication schedule; and
- embedding said selected datum in said programming signal.

176. (New Claim) The method of claim 172, wherein said storage device comprises a file storage medium and said programming signal and said first instruct signal are stored in a file on said file storage medium, said method further comprising the steps of:

- selecting a second instruct signal, said second instruct signal being one of:
- (1) a switch control signal;
  - (2) a timing control signal;
  - (3) a locating control signal;
  - (4) an instruct-to-contact signal that designates a remote receiver station;
  - (5) an instruct-to-transfer signal that designates programming;
  - (6) an instruct-to-delay signal that designates programming;
  - (7) an instruct-to-decrypt or instruct-to-interrupt signal that designates programming and one of a method of decryption and interruption;
  - (8) one of an instruct-to-enable and an instruct-to-disable signal that designates an apparatus;
  - (9) an instruct-to-record signal that designates programming;
  - (10) an instruction signal that controls a multimedia presentation;

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- (11) an instruction signal that governs a receiver station environment;
  - (12) an instruct-to-power-on signal that designates a receiver;
  - (13) an instruct-to-tune signal that designates one of a receiver and a frequency;
  - (14) an instruct-to-coordinate signal that designates multiple apparatus;
  - (15) an instruct-to-compare signal that designates one of a news transmission and a computer input;
  - (16) an identifier signal that causes a computer to instruct a plurality of tuners to tune to one of a broadcast and cablecast transmission;
  - (17) an instruct-to-coordinate signal that designates multiple units of multimedia information and one of: (1) an output time and (2) an output place;
  - (18) an instruct-to-generate signal that designates an output datum;
  - (19) an instruct-to-transmit signal that designates a computer output;
  - (20) an instruct-to-overlay signal that designates a video image;
  - (21) an instruct-that-if signal that designates a function to perform if a predetermined condition exists;
  - (22) an instruct-to-enable-and-deliver signal that designates information that supplements a video image;
  - (23) an instruct-to-transmit signal that designates a computer peripheral storage device;

(24) a code signal that designates a datum to remove or embed;  
and

(25) a signal addressed to a receiver station apparatus; and  
storing said selected second instruct signal in said file on said file storage  
medium.

177. (New Claim) A method of generating and encoding signals to  
control a plurality of user stations, said method comprising the steps of:  
receiving and storing a program that contains video information;  
receiving an instruction, said instruction having effect at said plurality of  
user stations to: (a) generate information content to complete or supplement said  
program, (b) incorporate said generated information content into a programming  
signal, and (c) transmit to at least one of said plurality of user stations said  
program and said information content, said information content comprising at  
least one of video, audio, and a graphic;

encoding said instruction, said step of encoding translating said  
instruction to a control signal, said control signal directing a processor at at least  
one of said plurality of user stations to perform generation of said information  
content, incorporation of said information content into said programming signal,  
and transmission of said program and said information content, said control  
signal interacting with predetermined user data, said predetermined user data  
being specific for each of said plurality of user stations; and  
storing said control signal.

178. (New Claim) The method of claim 177, wherein supplemental  
program material is stored at the same location as said processor and said control  
signal directs said processor to generate a video overlay that is coordinated with  
said video information in said program, said method further comprising one of:

storing supplemental program material in conjunction with said program and said control signal; and

storing a second control signal in conjunction with said program and said control signal from said step of encoding, said second control signal having effect at at least one of said plurality of user stations to query a remote station or receive supplemental program material in one of a broadcast and cablecast transmission.

179. (New Claim) The method of claim 177, wherein said control signal directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further comprising one of:

transmitting a combined video signal from said program and said video overlay generated by said processor to a plurality of receiver stations; and

transmitting a combined video signal from said program and said video overlay generated by said processor to a co-located video display.

180. (New Claim) The method of claim 177, further comprising the steps of:

receiving a second instruction, said second instruction being one of :

(1) an instruction which is effective at at least one of said plurality of user stations to generate some output to be associated with said program;

(2) an instruction which is effective at at least one of said plurality of user stations to generate some output to be associated with said product, service, or information presentation;

(3) an instruction which is effective at at least one of said plurality of user stations to display one of a combined and sequential mass medium programming presentation and a user specific datum;

(4) an instruction which is effective at at least one of said plurality of user stations to process a user reaction to said program;

(5) an instruction which is effective at at least one of said plurality of user stations to communicate to a remote station a query in respect of information to be associated with said program ;

(6) an instruction which is effective at at least one of said plurality of user stations to control said at least one of said plurality of user stations to receive information to supplement said program;

(7) an instruction which is effective at at least one of said plurality of user stations to process a digital television signal; and

(8) an instruction which is effective at at least one of said plurality of user stations to serve as a basis for one of: (a) enabling an output device to display said program, and (b) enabling a processor to process code;

encoding said second instruction, said second step of encoding translating said second instruction to a second control signal, said second control signal directing said ancillary processor; and

storing said second control signal.

181. (New Claim) The method of claim 177, further having one of:  
embedding said control signal in the non-visible portion of a television signal;

embedding a code in said program that enables a computer or controller to control a presentation of said program in accordance with said control signal;

communicating a program identification code and storing said program identification code at a storage location associated with said program; and

communicating to and storing at a storage location associated with said program information to evidence one of the availability, use, and usage of said program at at least one of said plurality of user stations.

182. (New Claim) A method of communicating data and update material one of to and in a network, said network comprising a plurality of receiver stations each of which includes a data receiver, a data storage device, a control signal detector, a computer, and with each of said plurality of receiver stations being adapted to detect and respond to an instruct signal and to store data for subsequent processing, and with at least one of said plurality of receiver stations further including a transmitter, said method comprising the steps of:

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- (1) receiving data to be transmitted and delivering said data to a transmitter at a transmitter station;
  - (2) receiving an instruct signal which is effective in said network to: (a) generate information content to complete or supplement said data, (b) incorporate said generated information content into a data signal, and (c) transmit to at least one of said plurality of receiver stations said data and said information content, said information content comprising at least one of video, audio, and a graphic;
  - (3) transferring said instruct signal to said transmitter at said transmitter station; and
  - (4) transmitting an information transmission comprising said data and said instruct signal.

183. (New Claim) The method of claim 182, wherein at least one of identification data and said instruct signal is embedded in a television signal containing said data.

184. (New Claim) The method of claim 182, wherein said step of transmitting directs said information transmission to said plurality of receiver stations at the same time and each of said plurality of receiver stations receives or responds to said instruct signal concurrently.

185. (New Claim) The method of claim 182, wherein said step of transmitting directs said information transmission to said plurality of receiver stations at different times and each of said plurality of receiver stations responds to said instruct signal at a different time.

186. (New Claim) The method of claim 182, further comprising the steps of receiving said data at a data receiver, communicating said data from said data receiver to a memory location, and storing said data at said memory location for a period of time prior to communicating said data to a transmitter.

187. (New Claim) A method of communicating program material one of to and in a network, said network comprising a plurality of receiver stations each of which includes a program receiver, an output device, a control signal detector, a processor operably connected to said output device, with each of said plurality of receiver stations being adapted to detect and respond to an instruct signal, and with at least one of said plurality of receiver stations further including a transmitter, said method comprising the steps of:

(1) receiving a program to be transmitted at a transmitter station and delivering said program to a transmitter at said transmitter station;

(2) receiving an instruct signal at said transmitter station, said instruct signal operates in said network to: (a) generate information content to complete or supplement said program, (b) incorporate said generated information content into a programming signal, and (c) transmit to at least one of said plurality of

receiver stations said program and said information content, said information content comprising at least one of video, audio, and a graphic;

(3) transferring said instruct signal to said transmitter at said transmitter station; and

(4) transmitting from said transmitter station an information transmission comprising said program and said instruct signal.

188. (New Claim) The method of claim 187, wherein at least one of identification data and said instruct signal is embedded in a mass medium program signal containing said program.

189. (New Claim) The method of claim 187, wherein said step of transmitting directs said information transmission to said plurality of receiver stations at the same time and each of said plurality of receiver stations receives or responds to said instruct signal concurrently.

190. (New Claim) The method of claim 187, wherein said step of transmitting directs said information transmission to said plurality of receiver stations at different times and each of said plurality of receiver stations responds to said instruct signal at a different time.

191. (New Claim) The method of claim 187, further comprising the steps of receiving said program at a program receiver in said transmitter station, communicating said program from said program receiver to a memory location, and storing said program at said memory location for a period of time prior to communicating said program to said transmitter at a transmitter station.

192. (New Claim) A method of controlling a network, said network comprising a plurality of receiver stations each of which includes a signal receiver, at least one processor, and a signal detector, said processor being programmed to respond to signals received from said signal detector, with at



least one of said plurality of receiver stations further including a transmitter, said method comprising the steps of:

(1) receiving at a transmitter station an instruct signal which is effective at said plurality of receiver stations to: (a) generate information content to complete or supplement said instruct signal, (b) incorporate said generated information content into a signal containing said instruct signal, and (c) transmit to at least one of said plurality of receiver stations said instruct signal and said information content, said information content comprising at least one of video, audio, and a graphic;

(2) transferring said instruct signal from said transmitter station to a transmitter;

(3) receiving a control signal at said transmitter station, said control signal designating at least one of said plurality of receiver stations to which said instruct signal is addressed; and

(4) transferring said control signal from said transmitter station to a transmitter, said transmitter station transmitting said instruct signal and said control signal to said plurality of receiver stations.

193. (New Claim) The method of claim 192, wherein at least one of said instruct signal and said control signal is embedded in the non-visible portion of one of a television signal and a multichannel broadcast or cablecast signal which contains video.

194. (New Claim) The method of claim 171, further comprising the step of programming said at least one computer to respond to at least one control signal embedded in a television signal.

195. (New Claim) The method of claim 171, further comprising the step of programming said transmission station to detect at least one control signal embedded in a television signal.

196. (New Claim) A method of processing signals in a network, said network including at least one transmitter station and at least one receiver station, said method comprising the steps of:

inputting a plurality of signals to at least one of a switch and a computer at said at least one transmitter station, with at least two of said signals being multimedia signals, each of said multimedia signals including at least one of video, audio and data programming;

controlling said at least one of a switch and a computer to communicate said plurality of signals to said at least one receiver station in accordance with at least one timing instruction;

determining at least one of a programming type and subject matter contained in said multimedia signals;

passing said plurality of signals selectively to at least one processor at said at least one receiver station and controlling said at least one processor on the basis of information contained in said plurality of signals;

delaying at least one of the processing and communication of at least one of said plurality of signals; and

presenting multimedia programming at said at least one receiver station at at least one of a specific time and a specific place in response to an instruct-to-coordinate signal.

197. (New Claim) A method of processing signals to control a plurality of user stations, each user station having at least one processor, said method comprising the steps of:

receiving a programming signal which contains mass medium programming and communicating said programming signal to a storage device;

receiving at least one instruct signal which is effective to instruct said plurality of user stations to transmit said programming signal according to a predetermined multimedia transmission scheme and output said mass medium programming according to a predetermined multimedia presentation scheme;

selecting one of :

- (1) a time to communicate a first instruct signal, said first instruct signal being one of said at least one instruct signal; and
- (2) a storage location to communicate said first instruct signal to;

communicating said first instruct signal based on one of said selected time and said selected storage location; and

storing said programming signal and said first instruct signal at said storage device.

198. (New Claim) The method of claim 197, further comprising one of the steps of:

embedding said first instruct signal in said programming signal;

embedding a code in said programming signal that enables a processor to control the presentation of said mass medium programming in accordance with said first instruct signal;

communicating a program identification code to said storage device and storing said program identification code at a storage location associated with said programming signal;

communicating to and storing at said storage device information regarding one of the availability, use, and usage of one of said programming signal and said mass medium programming at a user station;

communicating to and storing at said storage device a second instruct signal which is effective at a user station to generate output to be associated with one of said programming signal and said mass medium programming;

communicating to and storing at said storage device a second instruct signal which is effective to generate output to be associated with one of a product and service, said one of a product and service being offered in said mass medium programming;

communicating to and storing at said storage device a second instruct signal which is effective to display one of a combined presentation and a sequential presentation of a mass medium program and a user specific datum;

communicating to and storing at said storage device a second instruct signal which is effective to process a user reaction to said mass medium programming ;

communicating to and storing at said storage device a second instruct signal which is effective to perform one of: (a) communicate to a remote station a query in respect of information to be associated with said programming signal , and (b) enable the display of said mass medium programming;

communicating to and storing at said storage device a second instruct signal which is effective to control a user station to receive information to supplement one of said programming signal and said mass medium programming;

communicating to and storing at said storage device a second instruct signal which is effective to process a digital television signal; and

communicating to and storing at said storage device code that: (a) serves as a basis for enabling an output device to display said mass medium programming, and (b) enables a processor to process said code.

199. (New Claim) The method of claim 197, wherein said selected memory location is embedded in said programming signal at said storage device, said method further comprising the step of storing information at said storage device that evidences at least one of:

- (1) a title of a television program;
- (2) an intended use of programming;
- (3) a transmission station;
- (4) a receiver station;
- (5) a network;
- (6) a broadcast station;
- (7) a channel on a cable system;
- (8) a time of transmission;
- (9) a identification of an instruct signal;
- (10) a source or supplier of data;
- (11) a publication, article, publisher, distributor, or advertisement; and
- (12) an indication of copyright.

200. (New Claim) The method of claim 197, said method further comprising the steps of:

selecting a datum that performs one of:

- (1) identifying computer software in said programming signal;
  - (2) specifying some of a way to instruct receiver end equipment
- what specific programming to select to play or record other than that

immediately at hand, how to load it on player or recorder equipment, when and how to play it or record it other than immediately, how to modify it, what equipment or channel or channels to transmit it on, when to transmit it, and how and where to file it or refile it or dispose of it;

- (3) designating an addressed apparatus;
  - (4) specifying information related to locating a signal;
  - (5) informing a processor of a fashion for identifying and processing a signal;
  - (6) enabling decryption;
  - (7) designating a communication schedule; and
- embedding said selected datum in said programming signal.

201. (New Claim) The method of claim 197, wherein said storage device comprises a file storage medium and said programming signal and said first instruct signal are stored in a file on said file storage medium, said method further comprising the steps of:

selecting a second instruct signal, said second instruct signal being one of:

- (1) a switch control signal;
- (2) a timing control signal;
- (3) a locating control signal;
- (4) an instruct-to-contact signal that designates a remote receiver station;
- (5) an instruct-to-transfer signal that designates programming;
- (6) an instruct-to-delay signal that designates programming;
- (7) an instruct-to-decrypt or instruct-to-interrupt signal that designates programming and one of a method of decryption and interruption;

- (8) one of an instruct-to-enable and an instruct-to-disable signal that designates an apparatus;
- (9) an instruct-to-record signal that designates programming;
- (10) an instruction signal that controls a multimedia presentation;
- (11) an instruction signal that governs a receiver station environment;
- (12) an instruct-to-power-on signal that designates a receiver;
- (13) an instruct-to-tune signal that designates one of a receiver and a frequency;
- (14) an instruct-to-coordinate signal that designates multiple apparatus;
- (15) an instruct-to-compare signal that designates one of a news transmission and a computer input;
- (16) an identifier signal that causes a computer to instruct a plurality of tuners to tune to one of a broadcast and cablecast transmission;
- (17) an instruct-to-coordinate signal that designates multiple units of multimedia information and one of: (1) an output time and (2) an output place;
- (18) an instruct-to-generate signal that designates an output datum;
- (19) an instruct-to-transmit signal that designates a computer output;
- (20) an instruct-to-overlay signal that designates a video image;
- (21) an instruct-that-if signal that designates a function to perform if a predetermined condition exists;

- (22) an instruct-to-enable-and-deliver signal that designates information that supplements a video image;
- (23) an instruct-to-transmit signal that designates a computer peripheral storage device;
- (24) a code signal that designates a datum to remove or embed;
- and
- (25) a signal addressed to a receiver station apparatus; and storing said selected second instruct signal in said file on said file storage medium.

202. (New Claim) A method of generating and encoding signals to control a plurality of user stations, each of said user stations having at least one processor, said method comprising the steps of:

receiving and storing a program that contains video information;

receiving an instruction, said instruction having effect at said plurality of user stations to transmit said program and information to complete or supplement said program according to a predetermined multimedia transmission scheme and output said program and said information according to a predetermined multimedia presentation scheme;

encoding said instruction, said step of encoding translating said instruction to a control signal, said control signal directing a processor at at least one of said plurality of user stations to perform said transmission of said program and said information, said control signal interacting with predetermined user data, said predetermined user data being specific for each of said plurality of user stations; and

storing said control signal .



203. (New Claim) The method of claim 202, wherein supplemental program material is stored at the same location as said processor and said control signal directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further comprising one of:

storing supplemental program material in conjunction with said program and said control signal; and

storing a second control signal in conjunction with said program and said control signal from said step of encoding, said second control signal having effect at at least one of said plurality of user stations to query a remote station or receive supplemental program material in one of a broadcast and cablecast transmission.

204. (New Claim) The method of claim 202, wherein said control signal directs said processor to generate a video overlay that is coordinated with said video information in said program, said method further comprising one of:

transmitting a combined video signal from said program and said video overlay generated by said processor to a plurality of receiver stations; and

transmitting a combined video signal from said program and said video overlay generated by said processor to a co-located video display.

205. (New Claim) The method of claim 202, further comprising the steps of:

receiving a second instruction, said second instruction being one of :

(1) an instruction which is effective at at least one of said plurality of user stations to generate some output to be associated with said program;

(2) an instruction which is effective at at least one of said plurality of user stations to generate some output to be associated with said product, service, or information presentation;

(3) an instruction which is effective at at least one of said plurality of user stations to display one of a combined and sequential mass medium programming presentation and a user specific datum;

(4) an instruction which is effective at at least one of said plurality of user stations to process a user reaction to said program;

(5) an instruction which is effective at at least one of said plurality of user stations to communicate to a remote station a query in respect of information to be associated with said program;

(6) an instruction which is effective at at least one of said plurality of user stations to control said at least one of said plurality of user stations to receive information to supplement said program;

(7) an instruction which is effective at at least one of said plurality of user stations to process a digital television signal; and

(8) an instruction which is effective at at least one of said plurality of user stations to serve as a basis for one of: (a) enabling an output device to display said program, and (b) enabling a processor to process code.

encoding said second instruction, said second step of encoding translating said second instruction to a second control signal, said second control signal directing said ancillary processor; and

storing said second control signal.

206. (New Claim) The method of claim 202, further having one of: embedding said control signal in the non-visible portion of a television signal;

embedding a code in said program that enables a computer or controller to control a presentation of said program in accordance with said control signal;

communicating a program identification code and storing said program identification code at a storage location associated with said program; and

communicating to and storing at a storage location associated with said program information to evidence one of the availability, use, and usage of said program at at least one of said plurality of user stations.

207. (New Claim) A method of communicating data and update material to a network, said network having a plurality of receiver stations each of which includes a data receiver, a data storage device, a control signal detector, a computer, and with each of said plurality of receiver stations being adapted to detect and respond to an instruct signal and to store data for subsequent processing, and with at least one of said plurality of receiver stations further including a transmitter, said method comprising the steps of:

- (1) receiving data to be transmitted at an origination station and delivering said data to an origination transmitter;
- (2) receiving an instruct signal which is effective in said network to transmit said data according to a predetermined multimedia transmission scheme and output said data according to a predetermined multimedia presentation scheme;
- (3) transferring said instruct signal to said origination transmitter; and
- (4) transmitting an information transmission comprising said data and said instruct signal.

208. (New Claim) The method of claim 207, wherein at least one of identification data and said instruct signal is embedded in a television signal containing said data.

209. (New Claim) The method of claim 207, wherein said step of transmitting directs said information transmission to said plurality of receiver stations at the same time and each of said plurality of receiver stations receives or responds to said instruct signal concurrently.

210. (New Claim) The method of claim 207, wherein said step of transmitting directs said information transmission to said plurality of receiver stations at different times and each of said plurality of receiver stations responds to said instruct signal at a different time.

211. (New Claim) The method of claim 207, further comprising the steps of receiving said data at a data receiver, communicating said data from said data receiver to a memory location, and storing said data at said memory location for a period of time prior to communicating said data to said origination transmitter.

212. (New Claim) A method of communicating program material to a network, said network comprising a plurality of receiver stations each of which includes a program receiver, an output device, a control signal detector, a processor operably connected to said output device, with each of said plurality of receiver stations being adapted to detect and respond to an instruct signal, and with at least one of said plurality of receiver stations further including a transmitter, said method comprising the steps of:

(1) receiving a program to be transmitted at an origination station and delivering said program to an origination transmitter;

(2) receiving an instruct signal at said origination station, said instruct signal operates in said network to transmit said program and information to complete or supplement said program according to a

predetermined multimedia transmission scheme and output said program and said information according to a predetermined multimedia presentation scheme;

(3) transferring said instruct signal to said origination transmitter;  
and

(4) transmitting from said origination station an information transmission comprising said program and said instruct signal.

213. (New Claim) The method of claim 212, wherein at least one of identification data and said instruct signal is embedded in a mass medium program signal containing said program.

214. (New Claim) The method of claim 212, wherein said step of transmitting directs said information transmission to said plurality of receiver stations at the same time and each of said plurality of receiver stations receives or responds to said instruct signal concurrently.

215. (New Claim) The method of claim 212, wherein said step of transmitting directs said information transmission to said plurality of receiver stations at different times and each of said plurality of receiver stations responds to said instruct signal at a different time.

216. (New Claim) The method of claim 212, further comprising the steps of receiving said program at a program receiver in said origination station, communicating said program from said program receiver to a memory location, and storing said program at said memory location for a period of time prior to communicating said program to said origination transmitter.

217. (New Claim) A method of controlling a network, said network comprising a plurality of receiver stations each of which includes a signal receiver, at least one processor, and a signal detector, said processor being programmed to respond to signals received from said signal detector, with at

least one of said plurality of receiver stations further including a transmitter, said method comprising the steps of:

- 1
- (1) receiving at an origination station an instruct signal which is effective at said plurality of receiver stations to transmit said instruct signal according to a predetermined multimedia transmission scheme and output programming according to a predetermined multimedia presentation scheme in response to said instruct signal;
- (2) transferring said instruct signal from said origination station to an origination transmitter;
- (3) receiving a control signal at said origination station, said control signal designating at least one of said plurality of receiver stations to which said instruct signal is addressed; and
- (4) transferring said control signal from said origination station to said origination transmitter, said origination station transmitting said instruct signal and said control signal to said plurality of receiver stations.

218. (New Claim) The method of claim 217, wherein at least one of said instruct signal and said control signal is embedded in the non-visible portion of one of a television signal and a multichannel broadcast or cablecast signal which contains video.

219. (New Claim) A method of processing multimedia signals in a network comprised of at least one transmission station and at least one receiver station, said at least one receiver station having a storage location for storing multimedia programming, said storage location being one of an optical disk player, a video recorder/player, and a computer, said method comprising:

inputting to said network a plurality of signals, with at least two of said plurality of signals being multimedia signals, each of said multimedia signals

comprising receiver station specific at least one of video, audio and data programming, said multimedia signals further including an embedded identification datum;

inputting said plurality of signals to a switch and a processor at said transmission station;

controlling said switch to communicate said plurality of signals to said receiver station according to timing instructions;

identifying the programming that is being inputted to said switch ;

communicating an instruct-to-coordinate signal to said receiver station;

delaying at least one of the processing and communication of said multimedia signals in response to at least one of said instruct-to-coordinate signal and programming stored at said processor; and

presenting multimedia programming to a subscriber at said receiver station at at least one of a specific time and a specific place in response to said instruct-to-coordinate signal, said multimedia programming being contained in said multimedia signals.

220. (New Claim) The method of claim 196, further comprising the step of recognizing an order in which said plurality of signals are at least one of stored, communicated, and processed.

221. (New Claim) The method of claim 196, further comprising the step organizing files containing said multimedia signals.

## II. REMARKS

In consonance with the agreement between Applicants and the Office regarding the co-pending U.S. patent applications related to this application, Applicants hereby join following claims from their related applications into the